Pacific Salmon Commission

2007/2008 Twenty Third Annual Report

Pacific Salmon Commission

Established by Treaty between Canada and the United States March 18, 1985 for the conservation, management and optimum production of Pacific salmon

Twenty Third Annual Report 2007/2008

Vancouver, B.C.
Canada

September 2010

PACIFIC SALMON COMMISSION

ESTABLISHED BY TREATY BETWEEN CANADA
AND THE UNITED STATES OF AMERICA
MARCH 18, 1985

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Letter of Transmittal

In compliance with Article II, Paragraph 14 of the Treaty between the Government of Canada and the Government of the United States of America concerning Pacific salmon, it is my pleasure as Chair of the Pacific Salmon Commission to present my compliments to the Parties and to transmit herewith the Twenty Third Annual Report of the Commission.

This report summarizes the activities of the Commission for the fiscal year April 1, 2007 to March 31, 2008. It includes reports on the results of the 2007 fishing season presented by the Parties and on meetings of the Commission and the Standing Committee on Finance and Administration. Also included are the annual reports of the Northern and Southern Fund Committees. Executive summaries of documents prepared by Pacific Salmon Commission staff and the joint technical committees during the period covered by this report are also presented.

A summary of the agreement is available on the PSC website: .psc.org.

The Auditors' report on financial activities of the Commission during the fiscal year April 1, 2007 to March 31, 2008, approved by the Commission, is also included in this report.

Yours Truly,

Dr. Jeffrey Koenings
Chair

PACIFIC SALMON COMMISSION

OFFICERS for 2007/2008

Chair	Dr. Jeffrey Koenings
Vice-Chair	Mr. Paul Sprout

COMMISSIONERS

Canada	United States
Mr. Ron Fowler	Mr. Ron Allen
Mr. Gerry Kristianson	Mr. David Bedford
Mr. Arnie Narcisse	Mr. Larry Rutter
Mr. Garnet Jones	Mr. James E. Bacon
Mr. Russ Jones	Mr. David Balton
Mr. Paul Kariya	Mr. Olney Patt Jr.
Mr. Paul Macgillivray	Mr. Rollie Rousseau

SECRETARIAT STAFF

Executive Secretary	Mr. Don Kowal
Administrative Officer	Mr. Ken Medlock
Chief Biologist	Mr. Mike Lapointe

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INTRODUCTION

Interception of Pacific salmon bound for rivers of one country in fisheries of the other has been the subject of discussion between the Governments of Canada and the United States of America since the early part of this century. Intercepting fisheries were identified through research conducted by the two countries on species and stocks originating from Alaska, British Columbia, Washington, Oregon and Idaho. The results of this research identified that Alaskan fishers were catching salmon bound for British Columbia, Idaho, Oregon and Washington. Canadian fishers off the West Coast of Vancouver Island were capturing salmon bound for rivers of Washington and Oregon. Fishers in northern British Columbia were intercepting salmon returning to Alaska, Washington, Oregon and Idaho, and United States fishers were catching Fraser River salmon as they traveled through the Strait of Juan de Fuca and the San Juan Islands towards the Fraser River.

Management of stocks subject to interception became a matter of common concern to both Canada and the United States. A mechanism to enable the countries to reap the benefits of their respective management and enhancement efforts was required. That mechanism is now provided through the Pacific Salmon Treaty, which entered into force upon the exchange of instruments of ratification by the President of the United States of America and the Prime Minister of Canada on March 18, 1985.

The Pacific Salmon Commission, guided by principles and provisions of the Treaty, establishes general fishery management regimes for international conservation and harvest sharing of intermingling salmon stocks. Each country retains jurisdictional management authority but must manage its fisheries in a manner consistent with the provisions of the Treaty. Implementation of the principles of the Treaty should enable the United States and Canada, through better conservation and enhancement, to prevent overfishing, increase production of salmon, and ensure that each country receives benefits equivalent to its own production. The Commission also serves as a forum for consultation between the Parties on their salmonid enhancement operations and research programs.

The organizational structure of the Commission is currently focused on four geographically oriented panels. The terms of new Treaty arrangements signed by the Parties in June, 1999 provided for the creation of a new Transboundary Panel. The Transboundary Panel's stocks of concern originate from the Alsek, Stikine and Taku River systems. The Northern Panel's stocks of concern are those which originate in rivers situated between Cape Suckling in Alaska and Cape Caution in British Columbia. The Southern Panel's stocks of concern are those which originate in rivers located south of Cape Caution, other than Fraser River sockeye and pink salmon. The Fraser River Panel has special regulatory responsibilities for stocks of sockeye and pink salmon originating from the Fraser River.

The functions of panels are to review annual post-season reports, annual pre-season fishing plans and ongoing and planned salmonid enhancement programs of each country, and to provide recommendations to the Commission for development of annual fishery regimes in accordance with the objectives of the Treaty. These plans, once adopted by the Commission and the governments, are implemented by the management agencies in each country.

The Fraser River Panel, in addition, has been accorded special responsibility for in-season regulation of Fraser River sockeye and pink fisheries of Canada and the United States in southern British Columbia and northern Puget Sound, in an area designated as Fraser River Panel Area Waters. Scientific and technical work is conducted for the Panel by the Fishery Management Division of the Commission's Secretariat staff.

Negotiations designed to lead to agreed fishery regimes were conducted at the government-to-government level commencing in the spring of 1998. A comprehensive agreement was reached by the Parties on June 30, 1999.

As a result of the agreement, long-term fishing arrangements are in place for ten years, except for Fraser River sockeye and pink salmon, which is a 12-year arrangement.

With fishery arrangements in place, the meeting agendas for the Commission have concentrated on implementation of the elements of the new arrangements that will improve fisheries management and aid the countries efforts to recover weakened stocks. These provisions include establishment of two bilaterally-managed restoration and enhancement funds, provisions to enhance bilateral cooperation, improvements to the scientific basis for salmon management and application of institutional changes to the Pacific Salmon Commission.

On December 4, 2002, the Parties signed an international agreement detailing a cooperative approach to conservation of salmon stocks originating in the Yukon River in Canada. The agreement will be included as an Annex of the Pacific Salmon Treaty. As such, the Yukon River Salmon Agreement is separate from the Pacific Salmon Treaty because it sets out a distinct regime for Yukon River salmon, while adhering to the broad science-based management principles of the Pacific Salmon Treaty.

The Commission meets at least once annually and conducts its business between meetings through its permanent Secretariat located in Vancouver, British Columbia. In the period April 1, 2007 to March 31, 2008, the Commission met on three occasions:

1. Commission Executive Session
   October 16-18, 2007 – Coeur d'Alene, Idaho

2. Post-Season Meeting of the Commission and Panels
   January 14-18, 2008 – Portland, Oregon

3. Twenty-Third Annual Meeting of the Commission
   February 11-15, 2008 – Vancouver, B.C.

This, the Twenty-Third Annual Report of the Pacific Salmon Commission, provides a synopsis of the activities of the Commission and its subsidiary bodies during its Twenty-third fiscal year of operation, April 1, 2007 to March 31, 2008.

Activities of the Commission

PART I
ACTIVITIES OF THE COMMISSION

A. EXECUTIVE SESSION OF THE PACIFIC SALMON COMMISSION
October 16-18, 2007, Coeur d'Alene, Idaho

The Commission met twice in executive session during the course of this meeting.

A discussion was held about the status of the renegotiation of Chapters 1, 2, 3, 5, and 6 of Annex IV of the Pacific Salmon Treaty. The Commission had previously identified key issues for discussion, issued a set of instructions to the Panels, and the Panels began negotiations. A separate system for the renegotiation of the Chinook Chapter was established. Negotiations were ongoing and seemed to be proceeding well.

The Commission heard a progress report from the Ad Hoc Habitat Scoping Committee. One of the Committee's tasks was to oversee the completion of a report on non-fishing factors responsible for affecting salmon populations in the Pacific Salmon Treaty area from 1999 onward. A draft of the paper was presented by Sara LaBorde of Washington Fish and Wildlife and Karen Calla of Fisheries and Oceans Canada. The report was entitled "Ad Hoc Scoping Committee Report on Salmon Habitat Restoration-Related Activities carried out by Canada and the United States 1999-2006" October 2007. It was agreed that Commissioners would provide input and recommendations to the authors about how the report could be revised. The revised report would be distributed to the Commissioners two weeks before the January 2008 session.

Mr. Frank Quinn and Dr. John Clark, Chair and Vice Chair of the Transboundary Panel provided an update on the Transboundary Panel's negotiation discussions. The Panel required more time to complete its negotiations. The Commission gave the Panel the authority to meet bilaterally in advance of the scheduled January 2008 Commission meeting in Portland.

Executive Secretary Don Kowal reported that the regulations governing the Commission's operating procedures had not been reviewed or updated in quite some time. Therefore, Commission staff had undertaken to bring the regulations into line with contemporary practices. The Commission was asked to review the proposed changes to the regulations.

The Commission agreed that the regulations should be reviewed and modernized on a regular basis. The Commission agreed to table the issue as an information item. The Commission would have the opportunity to review the proposed revisions and consider how to proceed after the negotiations were complete.

The Commission heard a presentation by the Pacific Salmon Treaty Reform Coalition. The Commission invited the Coalition to give the presentation in order that it could gain a better understanding of the Coalition's concerns. The session was also an opportunity for the Commission to clarify to the Coalition the PSC's processes, interests, and its history.

Mr. Jeff Curtis of Trout Unlimited, a representative of the Reform Coalition, introduced the members of the Coalition present. They were Mr. Greg Block of the Wild Salmon Center based in Portland, Oregon; Mr. Jeffrey Young of the David Suzuki Foundation based in Vancouver, B.C.; and Erika Thorson of the International Environmental Law Project based in Portland, Oregon. Also present were Elizabeth Bosley of Trout Unlimited and Chris Robbins of the Wild Salmon Center.

Mr. Young presented a summary of the proceedings of a workshop that was convened by the Coalition entitled "Evaluating the Pacific Salmon Treaty as a vehicle for sustainable conservation-based salmon management."

Mr. Curtis spoke about public participation in the Commission process. He highlighted the main points contained in a paper entitled "Making the Bylaws work for the Pacific Salmon Commission and Public Participation".

The Commission agreed that a session open to the public would be held at its January 2008 meeting. The open session would be formatted like an ordinary Commission meeting but with space made available for members of the public. The agenda would be circulated ahead of time and would be available to the public.

The annual work plans of the Panels and Committees to reflect obligations and assignments were tabled, discussed, and adopted.

The Commission adopted instructions to the Panels and Committees.

The roster of Commission officers for 2007/2008 was tabled and accepted.

B. MEETING OF THE COMMISSION AND PANELS
January 14-18, 2008, Portland, Oregon

The Commission met once in open session and twice in executive session during this meeting period.

During the open session the Parties tabled their respective post season fishing reports.

Dr. Marianna Alexandersdottir, Chair of the Coded Wire Tag (CWT) Ad Hoc Working Group gave a presentation about the progress made to date by the Working Group.

Mr. Steve Pennoyer gave a presentation on behalf of Dr. David Hankin, Chair of the Genetic Stock Identification (GSI) Workshop Steering Committee, entitled "Status Report: Genetic Stock Identification Workshop".

The draft report of the Ad Hoc Habitat Scoping Committee entitled "An Overview of Salmon Habitat and Restoration Related Activities in Canada and the United States 1999-2006" was distributed to the Commissioners. The Commissioners were asked to review the draft and to make comments and recommendations so that the report could be approved and finalized in February.

Registered and invited guests were given the opportunity to speak.

Mr. Buzz Thompson of the Stanford University School of Law provided a summary of a workshop held November 15 and 16, 2007. The workshop was sponsored by the Woods Institute, which is made up of more than 250 Stanford faculty members whose mandate is to examine and develop solutions to issues regarding sustainability. The Institute periodically holds workshops that involve a small set of experts who examine major policies and institutions to determine if a better job of promoting sustainability could be done.

The November workshop focused on the Pacific Salmon Treaty and the Pacific Salmon Commission. The workshop involved approximately 40 people, including scientists, Commission members, NGO representatives, and fishers. The conclusion reached by most in attendance was that the Commission is doing a good job and its work serves as a good example of how it is possible to reduce conflict. However, there also was the feeling by many that the Commission could do a better job in the promotion of sustainability. A summary of the workshop findings can be found on the Woods Institute's website at: woods.stanford.edu.

Mr. Jeff Curtis, Senior Salmon Policy Advisor with Trout Unlimited and a member of a coalition of groups called the Pacific Salmon Treaty Reform Coalition was introduced. He spoke about the Coalition and its objectives.

Ms. Cora Crome, Fisheries Policy Advisor to Sarah Palin, Governor of Alaska, spoke about Alaska's perspective on the Treaty's coast wide conservation programs. She encouraged the Commission in its efforts to successfully renegotiate the fishery regimes.

Dr. Dick Beamish, a member of the Committee on Scientific Cooperation (CSC), introduced the Committee's proposal that a two-day workshop be held about late run Fraser River sockeye. During the workshop researchers who had been studying the late-run issue over the past several years would meet, present their findings and discuss the results. Based on these results, the CSC would make recommendations to the PSC on how to proceed. A proposal to fund the workshop would be made to the Southern Endowment Fund Committee.

The Commission received progress reports from the Panels on their workplans.

In executive session the Commission received reports from the Panels regarding chapter renegotiations.

The Transboundary Panel had reached an agreement on final revised language for the Transboundary River Chapter. Dr. John Clark, Vice Chair of the Panel said that the negotiation was a long, challenging process but the end result was an agreement that ensured conservation and reasonable fishing opportunities to both Parties. It would allow for a cooperative management program for the next 10 years.

The Southern Panel presented a final version of the Coho Chapter for Commission approval. There remained outstanding issues regarding the Chum Chapter. The Panel would continue its negotiations and hoped to come to a final agreement in February.

The Northern Panel had come to a final agreement on a revised Northern Boundary Annex. It also came to an agreement on the northern provisions of the Coho Annex.

Dr. Koenings reported that the Chinook Negotiating team had made progress but there was more work to be done. The intention was to continue the negotiations at the February session and to hopefully come to a final agreement at that time.

The Commission discussed the review of the PSC's operating procedures and processes. It was agreed that after the negotiations were complete, a small group of Commission members would be established to begin to examine and possibly revise the bylaws.

It was agreed that an open session would be held at each of the Commission's meetings. The Panels would be directed to declare their meetings open or in executive session. The meetings would be closed if the issues to be discussed were of a sensitive nature. That decision would be made by the Panel Chairs.

C. PACIFIC SALMON COMMISSION ANNUAL MEETING
February 11-15, 2008, Vancouver, B.C.

The Commission held one open session and one executive session during this meeting period.

At the open session the final reports of the Coded Wire Tagging (CWT) Ad Hoc Working Group, of the Genetic Stock Identification (GSI) Workshop, and of the Ad Hoc Habitat Scoping Committee, were tabled, accepted and made available for public distribution.

Mr. Angus MacKay, Endowment Fund Committee Coordinator, presented the annual report of the Southern Boundary Restoration and Enhancement Fund and the Northern Boundary and Transboundary Rivers Restoration and Enhancement Fund for 2007. Mr. Mackay gave a presentation about the Southern Fund Committee's development of a strategic plan.

Executive Secretary Don Kowal reported on behalf of the Committee on Scientific Cooperation (CSC). The CSC's major initiative during the year was participation in the GSI Workshop. The tabling of the GSI Workshop Report would be considered the Committee's annual report.

The Commission received reports about the activities of the Panels.

The Fraser River Panel was conducting its typical pre-season planning process. The Panel was discussing guidance language and was close to an agreement.

The Southern Panel had agreed to a renewed Coho Chapter and would submit the final agreed upon language to the Commission before the end of the week. The Panel was making progress in renegotiating the Chum Chapter.

Because the Transboundary Panel focused its efforts on negotiations at the last session, it was working on completing its yearly post-season review.

The Commission took the opportunity to complement the Transboundary Panel Chairs and Panel members for developing agreed upon language for a renewed Transboundary Chapter, which was a remarkable achievement.

The Northern Panel completed all of its assignments by the end of January's session. Therefore, the Panel was not in attendance at this meeting.

The Commission heard testimony from registered and invited guests.

Mr. Jeff Curtis of the Pacific Salmon Treaty Reform Coalition spoke to the Commission. He stressed that the Coalition was in attendance to urge the scientific management of all of the salmon fisheries, commercial and recreational, based on the precautionary approach. The Coalition was also very concerned with habitat and hoped that habitat issues would be integrated into the Commission process.

It was announced that it was Mr. Rollie Rousseau's final meeting as a Commissioner. Mr. Rousseau served as a Commissioner from 1991 to 2008. He was also a longstanding member of the Finance and Administration Committee and of the Southern Endowment Fund Committee.

Mr. Rousseau was presented with a plaque of appreciation for his years of service. The Commissioners thanked Mr. Rousseau and expressed their appreciation for his contributions to the Commission and for his dedication and commitment to the resource.

The status of the renegotiations was discussed in executive session. The Commission accepted the final language for the renewed Chum and the Coho chapters as agreed upon by the Southern Panel. The Commission discussed the process that would be followed once the negotiations were complete.

The Commission held a follow up discussion about the CWT Workgroup Final Report and the GSI Workshop Final Report. The Commission discussed how the recommendations of the two reports could be integrated and acted upon in a coordinated manner. It was agreed that the Committee on Scientific Cooperation be directed to define clear and definitive objectives for a group that would be assigned to determine how the recommendations in both reports could be synthesized. The CSC would bring its recommendations to the Commission at the October 2008 session.

It was reported that Mr. Don Collingsworth, a former Commissioner and one of the negotiators of the original Pacific Salmon Treaty, had recently passed away. The Commissioners spoke about the importance of Mr. Collingsworth's contribution to the Commission process and to the salmon resource.

Activities of the Standing Committees

PART II
ACTIVITIES OF THE STANDING COMMITTEES

A. MEETINGS OF THE STANDING COMMITTEE ON FINANCE AND ADMINISTRATION

1. Committee Activities

The Committee met on December 13, 2007 in Vancouver BC and February 11, 13 and 14, 2008 in Vancouver BC, to consider a range of financial and administrative issues. The Committee's deliberations focused on the budget forecast for FY 2008/2009 and beyond.

The Committee approved the Commission budget at the contribution level of C$1,729,153 per party (Appendix D) with expenditures of C3,603,904 This represents a increased contribution per party over last year of $141,184. The Committee recommended acceptance of this budget which excludes any test fishing program costs, which traditionally have been reported separately by staff. This recommendation is being made with the Committee having spent considerable time discussing the upcoming second year of test-fishing under the "Larocque Decision", a court case in Canada which is having an impact on how test fishing and sampling costs are funded. Accordingly, further discussions are required to address PSC related budget implications.

The Committee also reviewed staff projections of expenditures for the balance of the current fiscal year. The staff reported a forecast carry-over of C$127,598 to next year. It was therefore recommended that the carryover from 2007/2008 be carried to fiscal 2008/2009 to offset costs of programs initiated in this fiscal year.

The Executive Secretary reviewed the projected budgets for 2009/2010, 2010/2011 and 2011/2012.

The Committee reviewed the PSC Meeting Schedule. The United States will advise of a location for the October 2009 Executive Session in Alaska shortly and Canada will review its suggestions for the October 2010 Executive Session.

The Executive Secretary advised that the need for the Commission to purchase a permanent Hydro acoustic site at Mission was not possible but that a lease has been negotiated for the site.

Staff reported that the revised PSC bylaws was presented to the Commission in October who have placed further review on hold until a sub-committee of the Commission has been appointed.

Finally, staff reported that KPMG have been the auditors of the Commissions finances since the start of this Commission. The staff will be soliciting bids for these services in order to insure that the Commission is receiving good and fair value for the dollars spent on these important services.

2. Secretariat Staffing Activities

A list of Secretariat staff employees as of March 31, 2008 is presented in Appendix E.

An updated membership list for panels, standing committees, joint technical committees and ad hoc working groups as of March 31, 2008 is presented in Appendix F.

B. MEETINGS OF THE STANDING COMMITTEE ON SCIENTIFIC COOPERATION

Based in part on the findings from the Coded Wire Tag (CWT) Expert Panel, the Committee on Scientific Cooperation (CSC) proposed and received funding for a series of two workshops designed to explore the potential for the use of Genetic Stock Identification (GSI) in the management of ocean salmon fisheries. A GSI Steering Committee, chaired by a member of the CSC, developed a detailed structure and identified a set of key issues to serve as a focus for the workshops.

Based on oral presentations and on final reports submitted by Coordinators for each of four workgroups established as part of the workshop process, the GSI Steering Committee, along with members of the CSC, developed a consensus set of recommendations that are presented in a summary report. The report is entitled *Recommendations for Application of Genetic Stock Identification (GSI) Methods to Management of Ocean Salmon Fisheries; Special Report of the GSI Steering Committee and the Pacific Salmon Commission's Committee on Scientific Cooperation,* PSC Technical Report 23.

Because the CSC's major initiative was participation in the GSI workshops, the tabling of this report is considered the Committee's annual report for 2007/2008.

C. MEETINGS OF THE NORTHERN AND SOUTHERN FUND COMMITTEES

The Northern and Southern Fund Committees have agreed that given the congruent nature of their agendas and their decision to combine the funds into a single master account for investment management purposes, and the efficiencies involved with respect to interaction with the fund managers, it was appropriate to meet together as a Joint Fund Committee at least for the time being. Thus the Joint Fund Committee met in person on two occasions: April 16th and November 27th, 2007.

The Joint Committee's first meeting in 2007 was held on April 16th, 2007 at the PSC offices in Vancouver. Mr. Chris Kautzky of Hewitt and Associates presented the Fund performance review for the fourth quarter of 2006 and gave a preview of the first quarter of 2007. Mr. Kautzky also presented an overview of potential alternative investment products and the opportunities and risks associated with diversifying the Fund's portfolio in the event of a downturn in the equity market.

The other Joint Fund Committee meeting of the year was an in-person meeting held at the PSC offices in Vancouver, BC on November 27th, 2007. As usual the

November meeting was marked by the annual Fund investment manager performance reports and interviews. Hewitt and Associates staff provided their introduction to, and review and analysis of, the performance review and manager evaluations. They also provided their third quarter report. The Committee was generally satisfied with the performance and reports from Brandes Investment Partners and from LSV Asset Management. The Committee was less satisfied with Barclays Global Investors who had underperformed for six consecutive quarters. Mr. Chris Kautzky also presented a discussion paper on Asset Mix and Spending Policy implications that, being cognizant of increasing equity market volatility in recent months, examined whether adapting the investment strategy and/or spending policies to capital market conditions may be required in the future.

In 2007 the Southern Fund invested $2.5M US, in 37 Improved Information projects, the single largest of which was a $380K investment in a collaborative feasibility study into the development of a fishwheel-based live capture and tagging facility for Fraser River sockeye and other species near Mission. Enhancement was the smallest of the three investment areas and in 2007 $117K US was awarded in this category. Interesting projects included enhancing survival of sockeye in Cultus Lake by purse seining for predatory pike-minnows and deterring seals through the use of electrical barriers.

The Southern Fund Committee continued to work on a Strategic Plan. A key element of the plan is the establishment of a number of Strategic Goals or intended outcomes to be realized over the term of the plan. These goals were used for the first time in the 2008 Call for Proposals issued in June 2007.

The Northern Fund Committee awarded grants of $3.78M US in 2007 with 60% of that money being directed towards Improved Information projects. This is consistent with a trend in the north that has seen major investments into filling the gaps in stock assessment and stock identification work in these large and remote watersheds, with less being spent on habitat restoration because a much greater proportion of the region encompasses watersheds not yet subject to the pressures of human activity found in the south. In the habitat portfolio, the smallest investment area for the Northern Fund at $370K US, sockeye spawning and rearing habitat in Lakelse and Kitwanga lakes were again the subject of on-going investments into flow augmentation, gravel improvements and habitat assessment work. Investments in enhancement projects in the north amounted to just over $1M US. Coho and sockeye are the main species of interest. Coho enhancement projects were supported in Bakewell Lake, AK and at Pallant Creek in the Queen Charlotte Islands. Larger in scale were the sockeye enhancement projects including McDonald Lake AK, Trapper Lake now in its fourth year, the Tuya harvest structure also in its fourth year of funding and year two of an investigation into the potential of hanging lakes for sockeye production in the Hartley Bay region of northern BC.

The Northern and Southern Funds contributed jointly to two "special case" projects in 2007 each proposed by a Committee of the PSC. The Committee for Scientific Cooperation was supported in its proposal to host a workshop series focused on the current and future uses of Genetic Stock Identification in ocean salmon management. The bilateral Chinook Technical Committee was also provided with funds to cover expenses associated with tasks that exceed the usual annual activities of the Committee and are

necessary to foster progress in the negotiations to renew expiring chapters of Annex IV of the Pacific Salmon Treaty.

A list of all 2007/08 Northern and Southern Fund projects can be found in Appendices A and B.

Activities of the Panels

PART III
ACTIVITIES OF THE PANELS

A. FRASER RIVER PANEL

The Fraser River Panel completed the 2007 fishery management plan for Fraser River sockeye salmon in Panel Area waters on June 7, 2007. The Panel carried out its in-season fishery management responsibilities as per Annex IV, Chapter 4. Commission staff conducted its regular in-season assessment programs and reported results to the Panel.

The Panel met in bilateral session during the January and February 2008 meetings of the Commission to review the results of the 2007 fishing season, to receive reports from Canada on spawning escapements and to discuss issues of concern for the 2008 fishing season. Commission staff reviewed concerns regarding the likely continued early upstream migration behavior of Late-run sockeye and provided the Panel with policy options for 2008.

B. NORTHERN PANEL

The bilateral Northern Panel met at the PSC Post Season meeting in Vancouver, British Columbia in January 2008. Fishery managers of both parties presented information to the Panel on 2007 treaty-related fisheries and stock status in the Northern Boundary area.

As specified in Annex IV, Chapter 2, the Panel reviewed the Northern Boundary Technical Committee annual update on the allowable and actual harvests of salmon. Formal reviews had previously been completed up to and including the 2005 season. Information for 2006 was reviewed at this meeting in preparation for approval when the Northern Boundary Technical Committee provides their final report.

The Panel reached agreement on recommendations for the renewal of the primary provisions and language of Chapter 2 (Northern Boundary) at the February 2007 meeting. At the January 2008 meeting, the Panel monitored the progress of the renegotiation of fishery provisions in related Chapters of Annex IV.

The Panel received a summary of the status of the Northern Fund projects that had been short-listed for funding consideration by the Northern Fund Committee. Additional information was sought and received on a number of projects and Panel members were encouraged to provide appropriate input to their respective Fund Committee members.

The bilateral Northern Panel also met at the PSC Annual Meeting in Portland, Oregon. The Panel continued monitoring the renegotiation of other Annex IV fishery provisions and worked on relevant conforming language as necessary. The Panel also reviewed a list of the Northern Fund projects that had received final approval for funding by the Northern Fund Committee.

C. SOUTHERN PANEL

No reports were finalized for publication during this reporting period.

D. TRANSBOUNDARY PANEL

The Transboundary Panel met extensively in bilateral session during the October 2007 and the January and February 2008 meetings of the Commission. Most of the work undertaken and completed by the Panel during these three meetings involved negotiation of revised language for the Transboundary portion of the revised 2008 agreement between the Parties. Agreement concerning revised Transboundary language was reached for all portions except the overage/underage portion which was scheduled for the 2009 meetings. During the January and February bilateral sessions, the Panel received several reports by staff of the Alaska Department the Canadian Department of Fisheries and Oceans concerning fisheries, stock assessments and joint enhancement activities that took place in both countries in 2007.

Review of 2007 Fisheries and Treaty-Related Performance

PART IV
REVIEW OF 2007 FISHERIES AND TREATY-RELATED PERFORMANCE

The following review has been drawn from a number of reports prepared by Commission staff, joint technical committees, and domestic agencies for presentation to the Commission. Source documents are referenced for each part of this review. All figures are preliminary and will be updated in future reports as more complete tabulations become available.

A. FRASER RIVER SOCKEYE SALMON

Pre-season Planning

1. Prior to the season, a median abundance of 6.2 million Fraser River sockeye salmon and a Johnstone Strait diversion rate of 32% were expected. The forecasted 50% migration dates (relative to Area 20) for Early Stuart, Early Summer, Summer and Late-run sockeye salmon were July 1, July 31, August 8 and August 16, respectively. The median forecast abundance of Fraser River pink salmon was 19.6 million fish, with an Area 20 50% migration date of August 29.

2. Pre-season spawning escapement goals established by Canada's spawning escapement plan were 45,000 Early Stuart, 276,000 Early Summer, 1.3 million Summer, 245,000 Birkenhead and 612,000 Late-run sockeye, for a total of 2.5 million spawners. A Management Adjustment (MA) of 89,000 fish was added to the Early Summer spawning escapement target to increase the likelihood of achieving the target. The MA was based on relationships between river conditions (discharge and temperature) as they relate to historic differences (DBEs) between lower river (in-season) and upriver (post-season) escapement estimates. The escapement target for Fraser pink salmon was 6.0 million fish.

3. For Late-run sockeye, the Panel assumed a continuation of the early upstream migration behaviour and associated high mortality that has occurred since 1996. The Panel adopted a flexible approach to the management of Late-run sockeye by combining Canada's spawning escapement plan (see point 2, above) with a MA based the historic relationship between upstream migration timing and DBE. The Panel assumed a DBE of 42.5% based on the midpoint of the average difference between estimates for the years 1998, 1999, 2002 and 2003 (37%) and the predicted DBE from the Management Adjustment model (48%) using the assumed upstream migration date of August 29. The MA model included 2006-2007 cycle line data (i.e., Adams dominant cycle lines), but excluded the 2006 data point. For pre-season planning purposes, this generated a predicted MA of 453,000 fish and resulted in a Late-run exploitation rate target of 31%. Late-run escapement and catch targets were expected to change during the in-season management period as return abundances and MAs were updated. For Canadian fisheries, the exploitation rate on Late-run Cultus sockeye was further constrained to 20% to meet conservation needs.

4. The projected Total Allowable Catch (TAC) of Fraser River sockeye salmon was 2.7 million fish, of which 16.5% (448,000 fish) was the United States share. The projected TAC of Fraser River pink salmon was 13.6 million fish, of which 3.5

million fish (25.7%) were allocated to the United States. There were no paybacks owed for either species from previous years.

5. Pre-season modeling showed it was unlikely the available Summer-run TAC could be harvested, due to constraints required in order to meet spawning escapement targets for co-migrating Early Summer and Late-run stocks.

6. The Panel adopted a management plan and fishery regime before the fishing season, including the Principles and Constraints, Guidelines to Address Late Run Concerns, Panel Management Process and Regulations.

In-season Management Considerations

7. Abundances of Fraser sockeye were substantially below the forecasts for all management groups, resulting in complete closures of sockeye-directed commercial fisheries in both countries. Migration timing of sockeye salmon was as predicted with the exception of Early Summer-run sockeye, which arrived 5 days later than expected. Pink salmon arrived almost a week earlier than expected and substantially below the forecast abundance. Directed pink fisheries were severely limited due to overlap with the Late-run sockeye migration and restrictions to protect that group.

8. With the exception of Early Stuart sockeye which experienced higher than average flows, most Fraser River sockeye salmon were exposed to near average temperature and flow conditions during their upstream migration. As a consequence, in-season MA factors decreased relative to pre-season expectations. In-season indications of an earlier than expected in-river migration of Late-run sockeye (August 27, later returned to August 29), resulted in a slight increase to the predicted MA factor for that group.

Run Size, Catch and Escapement

9. Returns of adult Fraser sockeye totalled 1.5 million fish, which was only 24% of the median pre-season forecast and the lowest Fraser sockeye return since 1947 (60 years). These returns also represented the lowest returns per spawner on record for Fraser sockeye. Divided into management groups, adult returns totalled 13,000 Early Stuart, 195,000 Early Summer, 635,000 Summer, 143,000 Birkenhead and 522,000 Late-run sockeye. All management groups showed poor returns, ranging from 19% to 34% of the median pre-season abundance forecasts. The marine survival of Chilko sockeye was only 1.4%, the lowest observed since the 1957 brood (return year 1961). Similar poor returns of other stocks and species throughout the Pacific northwest suggests the likely cause was very low marine survival of salmon that entered the ocean as juveniles in 2005. The ocean was extremely warm in 2005, which limited productivity and food for young salmon. The total return of Fraser River pink salmon was 11,000,000 fish, or 56% of the median forecast. Unlike sockeye salmon, pink salmon that returned in 2007 entered the ocean in 2006 and thus were not impacted by the poor ocean conditions in 2005.

10. Catches of Fraser River sockeye salmon in all fisheries totalled 376,000 fish, including 199,000 fish caught by Canada, 143,000 fish by the United States and 34,000 fish by test fisheries. The Canadian catch included 197,000 fish in First Nations, 200 fish in recreational and 2,100 fish in ESSR fisheries (Excess Salmon to Spawning Requirements), but none in commercial fisheries. In Washington, Treaty

Indian fishers landed an incidental ceremonial harvest of 3,600 sockeye in fisheries directed at Fraser River pink salmon. There was no sockeye harvest by Non-Indian fishers. An estimated 139,000 Fraser sockeye were harvested in Alaska.

11. Catches of Fraser River pink salmon in all fisheries totalled 872,000 fish, including 428,000 fish caught by Canada, 411,000 fish by the United States and 33,000 fish by test fisheries. The Canadian catch included 1,500 fish in commercial, 349,000 fish in First Nations, and 78,000 fish in recreational fisheries. In Washington, Treaty Indian fishers harvested 221,000 fish, Non-Indian fishers harvested 160,000 fish, and there was a recreational catch of 30,000 fish.

12. DFO's estimates of spawning escapements to streams in the Fraser River watershed totalled 887,000 adult sockeye. This escapement was 55% lower than the brood year (2003) escapement of 2.0 million adults, and was the lowest escapement on the cycle since 1971. Compared to the brood year, spawning escapements were 59% lower for Early Stuart, 36% lower for Early Summer, 57% lower for Summer, 69% lower for Birkenhead and 49% lower for Late-run stocks. Spawning success of female sockeye in the Fraser watershed averaged 96%.

13. DFO has not enumerated Fraser River pink salmon spawners since 2001. Pink salmon escapement (10.1 million fish) was therefore estimated by subtracting the total catch in all fisheries (872,000 fish) from the total abundance estimated from test fishery data (11.0 million fish).

14. The annual diversion rate through Johnstone Strait was 45% for Fraser sockeye and 40% for pink salmon.

Achievement of Objectives

15. In order of descending priority, the goals of the Panel are to achieve the targets for spawning escapement, international sharing of the TAC and domestic catch allocation.

16. In-season management decisions are based on potential spawning escapement targets (i.e., spawning escapement targets plus MAs). In-season estimates of potential escapement (i.e., Mission escapement minus First Nations and recreational catches above Mission) were lower than the targets for Early Stuart (8% under), Early Summer (30% under), Summer (20% under) and Late-run sockeye (14% under), but slightly higher than the target for Birkenhead (11% over). These results are mainly due to reductions in Summer and Late-run abundance estimates after most First Nations fisheries were complete.

17. Spawning escapement objectives are assessed by comparing spawner enumeration estimates with targets calculated by applying Canada's Spawning Escapement Plan to post-season estimates of run size. Upriver estimates of spawning escapement were substantially below post-season targets for all sockeye management groups: Early Stuart – 59% under, Early Summers – 29% under, Summers – 28% under, Birkenhead – 27% under and Late-run – 45% under. In total, spawning ground estimates were 451,000 fish or 34% below the target. There are a number of causes for this result. For Early Stuart sockeye the spawning escapement target was essentially the entire run and the catch was minimal (1,000 fish), so the shortfall was due to the run size being too low given the -55% DBE experienced by this stock. The observed DBE was similar to the prediction by the in-season MA model (-51%), so the number of Early Stuart fish that arrived on the spawning grounds was similar to

what was expected. The situation was similar for Late-run sockeye, i.e., the run-size was too small to achieve the spawning escapement target given the observed -49% DBE. For the Late run, however, an added component was that catches exceeded the available harvest, primarily in Canadian First Nations and Alaskan fisheries. For Early Summer and Summer-run sockeye the escapement shortfalls are mainly attributable to Canadian First Nations and Alaskan catches that exceeded the available harvest, with larger than expected %DBEs also being a factor for the Summer run.

18. The escapement of pink salmon was 69% above the target of 6,000,000 fish. Fisheries on pink salmon were restricted due to conservation concerns for sockeye salmon in general and Late-run sockeye in particular.

19. The exploitation rate for Cultus Lake sockeye was 15%, which was less than the Canadian exploitation rate limit of 20% for this stock.

20. Based on the TAC calculation method set out in Annex IV, Chapter 4 of the Pacific Salmon Treaty, by the end of the season there was no Fraser sockeye TAC available and thus the small harvests in both countries represent either by-catch during fisheries directed at other species or harvest taken before dropping run size estimates reduced fishery opportunities. In this calculation, the allowable catch is fixed on the date that Panel control of the last U.S. Panel Area was relinquished (September 21 in 2007), while catches are the post-season accounted totals. The small overage of 3,600 sockeye in the United States (Washington) was due to sockeye by-catch in commercial pink-directed Treaty Indian fisheries. These sockeye were not sold, however, and were used as C&S catch (Ceremonial and Subsistence). Canada caught 163,000 sockeye over their share of the end-of-season TAC in First Nations FSC fisheries (Food, Social and Ceremonial) during periods when limited harvest was available or as by-catch in fisheries directed at other species. In contrast, catches of Fraser River pink salmon were substantially below target levels in both countries. Fraser pink salmon catches were constrained by conservation measures necessary to protect Late-run sockeye.

21. In terms of domestic allocation goals for Fraser sockeye, the sockeye salmon caught in United States Panel Areas was attributed entirely to Treaty Indian fishers.

22. There was no commercial allocation and no commercial catch of Fraser sockeye in Canada.

23. Treaty Indian and Non-Indian fishers, respectively, caught 421,500 and 452,500 fish less than their shares of the U.S. TAC of Fraser River pink salmon.

24. The commercial catch of Fraser pinks in Canada was only 1,500 fish, with 97% of these caught in Area H troll fisheries and the remainder in Area B seine fisheries.

25. By-catches of non-Fraser sockeye and pink salmon in commercial fisheries regulated by the Fraser River Panel totalled zero sockeye and 92,000 pink salmon in 2007. Catches of other Fraser and non-Fraser salmon species included 2,700 chinook, 590 coho, 4 chum and no steelhead.

Allocation Status

26. By Panel agreement, the United States carried a payback of 3,600 sockeye forward to the 2008 season.

B. 2007 POST-SEASON REPORT FOR CANADIAN TREATY LIMIT FISHERIES

Introduction

Fisheries in 2007 were conducted according to Annex IV of the Pacific Salmon Treaty. The arrangements contained in Annex IV include those initially agreed to between Canada and the United States in June, 1999 as well as additional agreements reached by the Commission and/or Panels since that time (e.g. Transboundary Chinook arrangements). The conservation-based approach commits the two Parties to abundance-based management for all stocks covered by the Treaty.

Catches reported below provide the best information available to date, and may change when all catch information for 2007 has been reviewed. The catches are based on in-season estimates (hailed statistics), on-the-grounds counts by Fisheries and Oceans Canada management staff and independent observers, logbooks, dockside tallies, and landing slips (First Nation fisheries), fish slip data (commercial troll and net), and creel surveys, logbooks and observers (sport and commercial).

Annex fisheries are reported in the order of the Chapters of Annex IV. Comments begin with expectations and management objectives, followed by catch results by species, and where available and appropriate, escapements. The expectations, management objectives, catches and escapements are only for those stocks and fisheries covered by the Pacific Salmon Treaty (PST); domestic catch allocations have been excluded. A table attached at the end of this report summarizes 1995-2007 catches in Canadian fisheries that have at some time been under limits imposed by the Pacific Salmon Treaty.

Transboundary Rivers

<u>Stikine River</u>

Canada developed a fishing plan for the Stikine River based on the catch sharing and management arrangements outlined in Annex IV, Chapter 1, Paragraph 3 of the Pacific Salmon Treaty (PST), including the new arrangements for Stikine Chinook and coho salmon agreed to on 17 February, 2005. Accordingly, the 2007 management plan was designed to meet agreed escapement targets and the following harvest objectives: to harvest 50% of the total allowable catch (TAC) of Stikine River sockeye salmon in existing fisheries; to allow additional harvesting opportunities for enhanced sockeye stocks in terminal areas that were surplus to spawning requirements; to harvest up to 5,000 coho salmon in a directed coho fishery; and, to harvest approximately 5,000 to 12,400 large Chinook salmon in a targeted fishery, based on the pre-season forecast, recognising this number could change once in-season run projections were available. The Canadian percentage of the Chinook Allowable Catch (AC) fluctuates based on the terminal run size providing higher catch shares when abundance is low and lower catch shares in years of higher abundance.

The 2007 season opened on 06 May, statistical week 19 (SW19), and ended 20 October (SW42). Commercial gear consisted of up to two, 135 metre gillnets per fisher. The maximum mesh size was restricted to 204 mm. Only one of the two nets was permitted to be deployed as a drift net. Through 09 June (SW 23), the fishing zone for the lower

Stikine commercial fishery extended from the international border upstream to near the confluence of the Porcupine and Stikine rivers and also included the lower 10 km of the Iskut River. Commencing SW 24 (week ending 16 June), the fishing area in the lower Stikine River was increased upstream 26 km to the mouth of the Flood River.

Fishery openings in the upper Stikine commercial fishery, which is located upstream from the Chutine River, generally mirrored those in the lower Stikine commercial fishery. Fishers were permitted one net and effort was low throughout the season.

The First Nation fishery located near the community of Telegraph Creek, B.C. was active from late May to September. There were no time or gear restrictions imposed on this fishery, although extremely high water conditions negatively affected effort and fishing success this year.

The Chinook sport fishery is centred at the mouth of the Tahltan River, including the mainstem Tahltan River. Sport fishing activity also occurs less intensively in the Iskut River and other areas within the Stikine River drainage. Sport fishing activity commenced in late June and peaked in mid July. Extremely high water conditions in late June and throughout most of July resulted in zero (0) catch reported and very light fishing effort for Chinook salmon in 2007.

Sockeye salmon

The pre-season forecast for Stikine sockeye salmon, as provided by the Canada/U.S. Technical Committee for the Transboundary Rivers (TCTR), was for a terminal run size[1] of 233,600 fish, including 140,600 Tahltan Lake origin sockeye salmon (60,800 wild and 79,800 enhanced), 28,000 enhanced Tuya Lake sockeye, and 65,000 non-Tahltan wild sockeye salmon. For comparison, the previous 10-year average (1997-2006) terminal run size is approximately 184,200 fish.

Preliminary combined catches from the Canadian commercial and First Nation gillnet fisheries in the Stikine River in 2007 included 59,237 sockeye, which was close to the 1997-06 average of 59,821 fish. The lower Stikine commercial fishery harvested 56,138 sockeye, while the upper Stikine commercial and First Nation fisheries harvested a total of 912 and 2,187 sockeye, respectively. The preliminary estimate of the total contribution of sockeye salmon from the Canada/U.S. fry-planting program to the combined Canadian First Nation and commercial catches is 31,037 fish, or 52% of the catch. In addition to these catches, 1,108 sockeye salmon were taken in a test fishery located near the international border. For reasons explained below, no fish, except for a small sample of 150 sockeye, were harvested in the Tuya River terminal fishery in 2007.

A total of 21,074 sockeye salmon was counted through the Tahltan Lake weir in 2007; 27% below the 1997-2006 average of 28,900 fish. The 2007 count was approximately 8% below the escapement goal of 24,000, but within the escapement goal range of 18,000 to 30,000 fish. An estimated 8,000 fish (38%) originated from the fry-planting program, which differs from the 60% contribution of smolts observed in 2004, the principal cycle year contributing to the 2007 return. A total of 200 sockeye salmon was sacrificed at the

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[1] Terminal run excludes allowances for U.S. interceptions that occur outside the District 108 and 106 gillnet fisheries.

weir for stock composition analysis. In addition, 2,839 sockeye salmon were collected for broodstock, resulting in a spawning escapement of 18,035 sockeye salmon in Tahltan Lake. Based on the final in-season Stikine Management Model (SMM) estimate of 90,300 in-river Tahltan Lake sockeye, minus the in-river catch of 38,500, the escapement to Tahltan Lake was projected to be ~51,000 fish. Tahltan River was flown to assess for fish blockages in July. Tashoots Creek, draining Tahltan Lake, was also assessed for fish blockages. However, no obstructions were observed in either river.

The spawning escapements for the non-Tahltan and the Tuya stock groups are calculated using stock ID, test fishery and in-river catch data. However, neither the test fishery nor the commercial fishery operated for the full duration of the sockeye run (the commercial fishery operated in June through to 08 August, SW32; the test fishery operated 28 July to 24 August, SW34). To determine run timing and subsequently to estimate in-river run sizes and escapements, commercial fishery CPUE was augmented by calculated weekly CPUE values for the period after SW32. The calculated CPUE's were based on the linear relationship between the commercial CPUE and the test fishery CPUE in 1986-04. All of the weekly data sets were significantly correlated. Based on this run reconstruction approach, the preliminary escapement estimates are 27,000 non-Tahltan and 7,000 Tuya sockeye salmon. The non-Tahltan spawning escapement estimate is within the escapement goal range of 20,000 to 40,000 fish. Aerial survey counts of non-Tahltan sockeye, however, indicated a record low return. The index count of only 120 fish, observed on 10 September, was 88% below the 1997-06 average of 973 fish. Several index sites were flown again on 15 September but the survey did not yield a count that was measurably higher than the 10 September survey.

The poor showing was unexpected in light of the near record test fishery CPUE of mainstem fish in the month of August. The possibility of the misidentification of test and commercial mainstem fish, which were delineated by egg diameter measurements greater than 3.6 mm, i.e. the traditional threshold used to identify non-Tahltan Lake from Tahltan Lake sockeye, is being investigated. Eggs diameters collected at the Tahltan Lake weir indicated that the eggs were measurably larger this year than in the past five years. For example, the average egg diameter at the Tahltan Lake in 2007 was 3.6mm, while the recent five year average egg diameter was 3.3 mm. An unusually large component of the sampled fish in the First Nation fishery located near Telegraph Creek, B.C had eggs greater than 3.6 mm. Genetic stock identification analysis garnered from scale samples to assess weekly mainstem sockeye abundance may be conducted to compare with the results derived from egg diameter measurements.

Another hypothesis for the lower than expected showing of sockeye on the spawning grounds points to the extreme high water conditions which persisted in the Stikine River throughout June and July which may have resulted in many fish not reaching the spawning areas. This certainly appears to have occurred for Chinook salmon.

An estimated 7,200 sockeye returned to the lower Tuya River in 2007. Inability to harvest these fish in the terminal area continues to be a concern. These concerns were not alleviated this year when another rock slide essentially wiped out several years of development of the primary harvest site. When they return, the adult sockeye from the Tuya Lake outplants unsuccessfully attempt to ascend the impassable barriers in the lower reaches of the Tuya River until they either perish or back out of the system. Some of these drop outs end up in nets fished in the Telegraph Creek area raising concerns over

poor quality, injured and battered up fish. Others stray[2] into Stikine River tributaries raising concerns over potential impacts on wild salmon stocks.

Based on the in-river run reconstruction of the Tahltan Lake run expanded by run timing and stock ID data in the lower river and estimated harvests of Stikine sockeye in U.S. terminal gillnet fisheries, the preliminary post-season estimate of the terminal sockeye run size is approximately 216,700 fish. This estimate includes 126,700 Tahltan Lake sockeye, 37,800 Tuya Lake sockeye, and 52,200 sockeye of the non-Tahltan stock aggregate. A Stikine run size of this magnitude is 18% above the 1997-2006 average terminal run size of 184,200 sockeye salmon. The preliminary post-season estimate of the Canadian TAC is approximately 77,200 sockeye; the actual catch of approximately 59,000 sockeye was about 24% below the Canadian TAC.

In-season management was influenced significantly by run size projections derived from SMM, which was updated and refined by the TCTR prior to the season. In-season run projections ranged from 203,000 fish in SW31 (29 July-04 Aug.) to 261,000 fish in SW27 (01-07 July). The final SMM projection indicated a terminal run size of approximately 225,000 sockeye and a TAC for Canada of approximately 82,000 sockeye. The sockeye mark-recapture programme initiated in 2000 continued in 2006 was not conducted in 2007.

Coho salmon

Poor prices in concert with the relatively low coho salmon quota of 5,000 fish resulted in a catch of only 47 coho, 83% below the 1997-2006 average of 274 coho salmon. All of the coho were caught incidentally in the targeted sockeye fishery.

Aerial surveys of eight index sites were conducted on 10 November. The combined count of 1,557 coho salmon, under relatively good viewing conditions, was 40% below the 1997-2006 average of 3,900 coho.

No Stikine River coho test fishery was conducted in 2007 due to budget constraints. This test fishery has been operated at various levels of vigor since 1986 and has provided managers with some level of confidence in assessing in-season run strength and providing inter-annual comparisons.

Chinook salmon

The pre-season forecast of Stikine Chinook salmon, as provided by the Canada/U.S. Technical Committee for the Transboundary Rivers (TCTR), was for a terminal run size of 37,500 large Chinook salmon. (Jack Chinook, i.e. fish with a mid-eye to fork length <660mm or a fork length of <735mm, are excluded in both the run size projections and management considerations). For comparison, the previous 10-year (1997-2006) average terminal run size was approximately 54,000 large Chinook salmon.

The total combined gillnet catch of Chinook salmon in the First Nation and commercial fisheries included 10,576 large Chinook and 1,735 jacks compared to 1997-2006 averages of 5,644 large Chinook and 1,026 jacks. The 2007 sport fishery failed to harvest

[2] Straying of Tuya sockeye has been confirmed using radio telemetry and sampling for thermal marks.

any Chinook salmon primarily due to extremely high river flows. Obviously the 2007 catch eclipses the recent 10 year average due to the targeted Chinook commercial fishery which commenced in 2005. The preliminary post season estimate of the terminal run is 41,800 large Chinook, which translates into a Canadian TAC of 10,400 fish. The total Canadian catch of 10,597 large Chinook salmon was therefore very close to the treaty entitlement.

In-season management was influenced significantly by run size projections derived from the Stikine Chinook Management Model (SCMM) and a joint Canada-U.S. mark-recapture program. In-season terminal run size projections ranged from 44,000 fish in SW23 (03-09 June) to 50,000 fish in SW25 (17-23 June). The final in-season SCMM projection indicated a terminal run size of approximately 46,300 large Chinook; whereas, the final in-season mark-recapture estimate was 43,300 large Chinook. According to these estimates, the TAC for Canada ranged from approximately 10,700 to 11,700 large Chinook salmon. To honour Annex IV, Chapter 1, Paragraph 3(a)(vii) which identifies the will of both Parties to spread the Chinook harvest over the season, weekly fishery openings were announced based on weekly guideline harvests developed from the current inseason run projections (or from the pre-season forecast before inseason projections were available) apportioned by historical run timing data. Overall, catches fell within weekly guidelines in seven of the eleven openings during the Chinook season. Extreme fluctuation in water levels affected the ability to meet weekly quotas in some weeks. During the first half of the season, catches were generally below respective guideline harvests. In response, the commercial fishing zone in the lower Stikine River was extended upstream approximately 26 km in SW24 (10-16 June). Management emphasis switched to sockeye salmon in SW26 (24-30 June). Note that the peak Chinook catch actually occurred in SW26 when the fleet had switched to sockeye fishing gear.

In addition to the mark-recapture study and aerial surveys, genetic samples were collected on a weekly basis from Chinook caught in the U.S. District 108 fishery and from weekly catches taken in the Canadian commercial fishery. These data will be used to assess run timing of Stikine stocks in District 108 and the lower Stikine commercial fishery.

The 2007 Chinook salmon escapement enumerated at the Little Tahltan weir was 562 large fish and 12 jack Chinook salmon, the lowest count on record. The escapement of large Chinook salmon in the Little Tahltan River was only 8% of the recent 10 year average of 7,300 fish and well below the MSY escapement goal for this stock of 3,300 large Chinook salmon. Because of extremely high water conditions the weir was installed approximately one week later than normal. The weir was inundated with flood waters for several days at the onset of the project; however, it was felt that few fish transited the weir undetected during this period. The annual aerial survey conducted by ADF&G in early August supported this claim in that the proportion of aerial count to weir count was not unusual in 2007. (Surveyors typically count 30-40% of what was enumerated at the weir.)

A mark–recapture study was conducted again in 2007 concurrent with the SCMM to assess in-river Chinook salmon abundance. Mark-capture estimates were calculated after SW25 (week ending June 23). The preliminary post-season estimate of the in-river run size, based on tag recoveries in the commercial fishery, is approximately 27,100 large Chinook. Accounting for the total Canadian catch of 10,600 large Chinook salmon, the potential total system-wide spawning escapement is estimated to be approximately

16,500 large Chinook salmon. This estimate is 44% of the recent 10 year average of 37,200 large Chinook and 900 fish below the escapement goal of 17,400 large Chinook salmon. However, based on weir counts, foot and aerial surveys, it appears that only a small fraction of the potential spawning escapement actually reached the spawning grounds in 2007.

Stikine River Chinook run timing to the lower Stikine commercial fishing area was approximately one week later than normal, whereas, fish arriving at the Little Tahltan weir were three weeks late. Very high water conditions may have been the cause of the delay and perhaps the paucity of fish entering the Little Tahltan River and other spawning areas. The escapement to the Little Tahltan River represented approximately only 3.4% of the estimated total Stikine River escapement compared to an average contribution of approximately 20% (1997-2006). Escapement counts in Verrett Creek (a tributary to the Iskut River) were also weak as reported by the carcass pitch crew stationed at the creek from 02-12 August. A very weak Chinook salmon return to Shakes Creek (near Telegraph Creek) was also reported by residents living at the creek mouth. Aerial surveys of the mainstem Tahltan River yielded very low counts (These were conducted as part of the Stikine Chinook salmon genetics baseline project. No samples were collected due to the poor showing of fish.)

Joint sockeye enhancement

Joint Canada/U.S. enhancement activities continued with approximately 3.7 million sockeye eggs collected at Tahltan Lake in the fall of 2007; this was below the target of 6.0 million. The failure to reach the egg take goal was due to the below average return of 21,000 fish to Tahltan Lake and the behaviour and/or distribution of the sockeye in the lake that resulted in fewer fish than normal utilizing the principal spawning and brood collection sites. Another constraining factor was the time period for the egg-take agreed by the Enhancement Sub-committee of the TCTR who has recognized the need for a period when wild spawning can occur without disruption caused by the egg take. In previous years, the end date for the egg take was set at September 25. In 2007, the egg take continued through 27 September with the final flight to the hatchery on 28 September amidst treacherous weather conditions.

Approximately 2.5 million fry were out-planted into Tahltan Lake in early to late May 2007. The fry originated from the 2006 egg-take and were mass-marked in the hatchery with thermally induced otolith marks. The balance of 1.2 million fry originating from the 2006 Tahltan Lake egg take were released into Tuya Lake in mid June, 2007.

Approximately 1.06 million sockeye salmon smolts were enumerated emigrating from Tahltan Lake in 2007, 24% below the 1997-2006 average count of approximately 1.4 million smolts. The contribution of hatchery origin fish was approximately 0.36 million smolts and represented 38% of the emigration.

For the fourth consecutive year, funding from the PSC Northern Fund was provided to address harvest and fish straying issues in the Tuya River. To address problems associated with fish capture in the lower Tuya River, a new fishway/trapping apparatus was designed and constructed in Vancouver during the spring of 2006 and transported to Whitehorse. Unfortunately the Tuya fish trapping project was not prosecuted because of the major rock slide at the Tuya River fishing site that occurred sometime in June 2006. The rockslide rendered the fishing site, which the fish trap was groomed for, unusable

due to changes in river hydrology and unsafe working conditions. In 2007, additional rock slide activity occurred in the lower reach of the Tuya River. A steering committee, consisting of Canadian and U.S. engineers and other technical advisors, visited the site in August 2007 to re-assess the conditions and to consider and discuss other fish capture options. The committee decided to proceed with plans to strategically blast rock and provide fish passage at the location of the 2006 rock slide. The committee will contract an engineering firm to design a fish harvest structure on the Tuya River at a site above the recently formed fish passage barrier. The firm will provide both design detail and cost estimates for the structure as well as the routing and cost of an access trail to the site. The final design will be governed by the conceptual design provided by the Tuya River steering committee. The steering committee is presently addressing the challenge of fish capture, but an approach to Tuya fish harvest options in the 2008 has not yet been finalized.

The Tuya straying study report, funded by the Northern Fund, was completed in February 2006. The objective of the report was to assess Tuya River sockeye salmon (strays) distribution, spawning activity and success, and spawning ground competition. The authors were also charged with providing a literature review on straying salmon and effects of straying on natural salmon populations. The authors concluded that …"*given the results of the literature review and the data collected to date in the Stikine River, the probability of genetic risk of Tuya River blocked fish appears to be extremely low. However, it is prudent to suppose that given a long enough period of time and a large enough number of that some successful straying and interaction of Tuya River fall back fish could take place*".

Taku River

As with the Stikine River, the fishing plan developed by Canada for the Taku River was based on the arrangements in Annex IV, Chapter 1, Paragraph 3 of the PST, including the recent amendment to Paragraph 3(b) regarding Chinook salmon. Accordingly, the plan addressed conservation requirements and contained the following harvest objectives: to harvest 1,400 large Chinook salmon in an assessment fishery designed to replace the Chinook test fishery until such time as the inseason run projection exceeded the trigger for a targeted Chinook fishery; to harvest 18% of the TAC of wild Taku River sockeye salmon, plus up to 20% of the projected sockeye escapement in excess of 100,000 fish; to attain a 50% share of the catch of enhanced Taku River sockeye; and, to harvest 3,000 to 10,000 coho salmon in a directed coho fishery, depending on in-river run size projections,. The 2007 season opened on 30 April, SW19, at an assessment level, and ended in SW40 (week ending October 7). Fishing area and gear restrictions were similar to previous years with the exception that mesh sizes up to 204 mm could be used until June 17, i.e. SW 25.

Sockeye salmon

The Canadian pre-season run outlook was for a total wild sockeye run of 211,700 fish, approximately 13% below the previous 10-year average total run size of 245,000 sockeye. An additional 5,500 sockeye was expected from Tatsamenie Lake fry outplants from the Canada/U.S. joint Taku sockeye enhancement program.

The 2007 Canadian wild sockeye catch totalled 14,972 sockeye, 14,821 of which were caught in the commercial fishery and 151 caught in the First Nation fishery. An

additional 355 sockeye was taken incidentally in the coho test fishery. The commercial catch was 44% below the 1997-2006 average of 26,600 sockeye. The preliminary estimate of the contribution of sockeye salmon from the Canada/U.S. enhancement program to Canadian fisheries is 1,573 fish, comprising 10% of the total.

The estimated total potential spawning escapement of 84,255 sockeye salmon in the Canadian section of the Taku River is slightly above the escapement goal range of 71,000 to 80,000 fish but below the 1997-2006 average escapement of 109,700 sockeye. Based on weir counts, escapements to the Little Trapper, Tatsamenie and Kuthai lake systems were 7,153, 11,187 and 204 sockeye, respectively. The Little Trapper escapement estimate was 52% below the 1997-2006 average while the Tatsamenie count was 30% above average. Of significant concern was the Kuthai Lake count which was only 4% of the 1997-2006 average, and failed to meet last year's record low. It is believed that high water levels in the Silver Salmon River prevented fish from reaching the lake. The enumeration project at King Salmon Lake was operated for the full migration period for the fourth year in a row but passed only five sockeye. However, several hundred sockeye were observed in the lake after the weir was removed. As was the case with the Kuthai Lake stock, it is believed that high water levels had a negative impact on the spawning migration.

Projections of the total sockeye run size, TAC, and total escapement were made frequently throughout the fishing season. The estimates were based on the joint Canada/U.S. mark-recapture program, the estimated interception of Taku River sockeye in U.S. fisheries, the catch in the Canadian in-river fishery, and historical run timing information. The preliminary post-season estimate of total run size is approximately 172,850 wild sockeye with a TAC of 92,850 to 101,850 sockeye. Escapement is estimated at 81,183 wild sockeye. Preliminary analysis indicates that the Canadian catch of wild sockeye (14,972 fish) represented 14.7-16.1% of the TAC of wild sockeye. The preliminary estimate of the total run of enhanced Taku sockeye salmon is approximately 8,874 fish of which Canada harvested 18% (1,553 fish), the U.S. harvested 48% (4,229 fish), and 35% (3,072 fish) spawned.

Coho salmon

The combined commercial and First Nation catch of 5,276 coho salmon was 8% above the 1997-2006 average catch of 4,881 coho salmon. The commercial fishery harvested 5,121 coho of which 2,861 fish were taken in the directed coho fishery, i.e. after SW33. A total of 155 coho was taken in the First Nation fishery. A test fishery, which started in SW36, harvested 2,676 coho. Preliminary mark-recapture data indicate a spawning escapement of 49,673 coho salmon in 2007. This estimate is approximately one-half of the previous 10-year average of 98,649 fish, but is above the upper end of the interim escapement goal range (27,500 – 35,000 fish). The preliminary estimate of the total in-river run into the Canadian section of the drainage is 57,625 coho. According to the PST harvest arrangements for Taku coho salmon, Canadian fishers were entitled to harvest up to 5,000 coho salmon in a directed fishery at a run size of this magnitude.

Chinook salmon

The bilateral pre-season run outlook was for a terminal run of 38,700 large Chinook, approximately 33% below the previous 10-year average of 57,600 fish. This fell short of the number required for a targeted Chinook fishery, specifically 42,400 fish (the escapement goal point estimate, plus the test fishery allocation, plus the Canadian and

U.S. base level catches). Normally, a test fishery for 1,400 large Chinook would have been prosecuted to provide the data for inseason estimates of abundance. However, due to a recent court case decision in Canada, it was not possible to conduct the test fishery in 2007. Consequently, with concurrence from the U.S. Panel and Technical Committee co-chairs, the commercial fishery was opened at an assessment level and managed stringently to the weekly guidelines developed for the test fishery.

The assessment fishery harvested 1,396 large Chinook; at no point throughout the run was sufficient abundance indicated to justify conducting targeted commercial fisheries. In-season projections of the terminal Chinook run size, allowable catch (AC), and escapement were made starting in SW21. The estimates were based on the joint Canada/U.S. mark-recapture program, the estimated interception of Taku River Chinook in U.S. fisheries, the catch in the Canadian in-river assessment fishery, and historical run timing information. The final in-season estimate of terminal run size was approximately 27,321 Chinook with an overall AC of 0 fish plus base level catches (BLC) of 6,400 fish (1,500 Canada; 3,500 U.S.; 1,400 test fishery). The Canadian and U.S catches of large Chinook were 1,146 and 2,325 fish, respectively.

Most of the Canadian treaty catch of 1,146 large Chinook was caught in the directed sockeye commercial fishery. This total included a First Nation fishery catch of 167 fish and an estimated recreational fishery catch of 105 fish. The commercial treaty catch, i.e. excluding the assessment fishery, of 874 large Chinook was well below the 1997-2006 average of 2,803 fish; however, this average includes targeted Chinook fisheries in 2005 and 2006. The harvest of small Chinook was 442 fish, 49% above the average of 297 fish.

Preliminary estimates derived from the joint Canada/U.S. Chinook mark-recapture program indicates a total potential spawning escapement of approximately 17,516 large Chinook salmon, well below the target of 36,000 fish for 2007, i.e. the escapement goal point estimate (N_{MSY}), and also below the lower end of the escapement goal range of 30,000 to 55,000 fish. The preliminary spawning escapement estimate is also well below the 1997-2006 average of 47,710 Chinook. Due to high water, aerial survey conditions were poor in all but two of the six index areas. The sum of these two index counts was 65% below the previous 10-year average of 1,861 Chinook salmon. As with the Stikine, it is possible the extreme high water conditions resulted in only a small portion of fish reaching the spawning grounds in 2007.

Joint sockeye enhancement

Joint Canada/US enhancement activities at Tatsamenie Lake continued in 2007 and an estimated 4.1 million viable eggs were delivered to the Snettisham Hatchery in Alaska for incubation and thermal marking. The egg take target of 5.0 million eggs was not achieved due to delayed broodstock maturation; the appropriate number of fish *were* collected and held but they did not mature in time for eggs to be taken. As part of a feasibility study associated with barrier removal at Trapper Lake, 950,000 eggs were taken from sockeye captured downstream of the barrier. Approximately 830,000 of these were delivered to the Snettisham Hatchery; the remaining 120,000 were planted in Tunjony Creek, a tributary to Trapper Lake.

In early June 2007, approximately 3.7 million fry were transported from Snettisham Hatchery to Tatsamenie Lake. The green egg-to-fry survival was 77%; IHNV was not a problem this year. The fry release was split between the north and south ends of the lake

with the north end receiving the majority of the fry. As part of the Trapper Lake barrier removal study, approximately 900,000 fry were out-planted into Trapper Lake in late June. The green egg-to-fry survival was 81% for the Little Trapper eggs and, as with the Tatsamenie Lake stock; there was no incidence of IHNV.

The 2007 Tatsamenie Lake sockeye smolt out-migration was estimated to be approximately 73,765 fish. The enhanced contribution, based on preliminary thermal mark analysis, was estimated to be 16%.

Alsek River

Although catch sharing of Alsek salmon stocks between Canada and the U.S. has not been specified, Annex IV of the PST does call for a co-operative development of abundance-based management regimes for Alsek Chinook, sockeye and coho stocks. Instead of managing to system-wide goals, which for the most part have been as yet unverifiable, the TCTR has established index goals for the Klukshu River stocks. Historically, the principal escapement-monitoring tool for Chinook, sockeye and coho salmon stocks in the Alsek drainage has been the Klukshu River weir, operated by Fisheries and Oceans Canada in co-operation with the Champagne-Aishihik First Nation. The Klukshu River is a tributary to the Tatshenshini River, which is the major salmon producing river system of the Alsek drainage.

Based on joint stock-recruitment analyses conducted on Klukshu Chinook and sockeye salmon, Canadian and U.S. managers agreed to a minimum escapement goal of 1,100 Klukshu Chinook salmon and an escapement goal range of 7,500 to 15,000 for Klukshu sockeye salmon for the 2007 season. An escapement goal for Klukshu coho salmon has not yet been developed.

The 2007 season was marked by the second lowest return of Chinook salmon on record and the third consecutive year that the Chinook escapement goal has not been achieved. One Chinook salmon was known to have been harvested in the First Nation fishery, which was well below the 10-year average (1997-2006) of 123 fish. The First Nation fishery harvested a minimum of 477 sockeye salmon, 39% of the 10-year average (1997-2006) of 1,223 fish. A single coho salmon was known to have been harvested in the First Nation fishery.

The recreational fishery harvested 40 Chinook, which is 30% of the 10-year average. The sockeye catch was below average with 10 retained and 43 live-released. To date, no coho catch has been recorded. Recreational catches have been adversely affected in recent years by significant re-channelisation of the Tatshenshini River and poor returns.

The Klukshu weir count of 677 Chinook salmon was 38% of the previous 10-year (1997-2006) average of 1,788 fish and is the second lowest count on record. The estimated spawning escapement of 676 Chinook salmon above the weir was well below the minimum escapement goal of 1,100 Klukshu Chinook salmon. Aerial survey counts, conducted by ADF&G, of Chinook in the Takhanne and Blanchard rivers and Goat Creek were all well below average.

The weir count and spawning escapement of Klukshu River sockeye salmon was 8,956 and 8,479 fish, respectively. The early-run weir count of 2,725 sockeye was 96% of the previous 10-year (1997-2006) average of 2,837 fish; whereas, the late-run count of 6,231

fish was 57% of the previous 10-year average of 11,019 sockeye salmon. The overall spawning escapement of 8,479 sockeye salmon in the Klukshu River was near the lower end of the escapement goal range (7,500 – 15,000 sockeye). The highest sockeye escapement was recorded in the neighbouring tributary of Village Creek where an electronic counter recorded an estimated 10,254 sockeye, 5.5 times the recent 10-year average. This is the highest count recorded for this system.

The Klukshu weir count of 300 coho salmon was 12% of the previous 10-year average of 2,584 fish. The weir is removed prior to the completion of the coho return due to budgetary constraints and icing conditions, and generally does not include fish that migrate after mid-October. In 2007, the weir was pulled on October 11th.

Northern British Columbia Pink Salmon

Areas 3-1 to 3-4 Pink Net Catch

For the year 2007, Canada was to manage the 3-1 to 3-4 net fishery to achieve an annual catch share of 2.49 percent of the annual allowable harvest (AAH) of Alaskan Districts 101, 102 and 103 pink salmon.

In the Canadian northern boundary area, above average pink salmon returns were anticipated for Area 3 (2.9 million) and for Area 4 (3.7 million). Actual Area 3 returns were as anticipated while the abundance of Area 4 pinks was less than anticipated. Average returns were expected for the SE Alaska pink stocks adjacent to the northern boundary area. With a Total Run of 52,342,936 Alaska District 101, 102 and 103 pink salmon in 2007, the AAH for the Area 3(1-4) net fleet was 1,035,664 Alaska District 101, 102 and 103 pink salmon. The 2007 Canadian pink catch in Sub-areas 3-1 to 3-4 was 1,740,271, with a preliminary estimate of the Alaska stock component of this catch being 1,422,130, or 3.42% of the AAH. This is above the allotted 2.49 % of the AAH.

The total Canadian pink catch of 1,740,271 in sub-areas 3-1 to 3-4 is higher than the 1985-2000 average catch of 1.46 million. The above average Area 3 pink harvest resulted from management restraints on Canadian net fisheries in Area 4 in order to minimize impacts on Skeena sockeye and increased outer Area 3 effort resulting from abundant pink salmon catches. The percentage of the 2007 Area 3 net catch taken in sub-areas (1-4) was 58 %, which equals the 1985-2000 average of 58%.

Pink escapements in 2007 generally were at or above target for the entire North Coast Area.

Area 1 Pink Troll Catch

For the year 2007, Canada was to manage the Area 1 troll fishery to achieve an annual catch share of 2.57 percent of the annual allowable harvest (AAH) of Alaskan Districts 101, 102 and 103 pink salmon. With a Total Run of 52,342,936 Alaska District 101, 102 and 103 pink salmon in 2007, the AAH for the Area 1 troll fishery was set at 1,068,938 pieces. The Canadian commercial troll fishery was open in the northern portion of Area 1 from June 15 to September 30. In addition, a directed pink fishery on the A-B line strip was permitted from July 1 - 24. These fisheries resulted in a total harvest of 61,276 pink salmon, with an estimated 55,418, or 90.4%, being of Alaskan origin. This equates to 0.13% of the AAH of

41,592,936 Alaskan Districts 101, 102 and 103 pink salmon, well below the annex agreement for 2.57 percent.

Chinook Salmon AABM Fisheries

The pre-season abundance index for North Coast B.C. troll and Q.C.I. Sport fisheries in 2007 was 1.35, which allowed a total catch of 178,000 Chinook salmon in these fisheries. Preliminary estimates indicate a total catch of 137,235 Chinook salmon; 83,235 caught in commercial troll fisheries and 54,000 caught in sport fisheries.

The North Coast B.C. troll fishery was opened for Chinook fishing from June 15 to July 17, 2007. The majority of the 2007 fishery was conducted under a demonstration fishery to examine the application of individual transferable quotas in the troll fishery. A total of 82,383 Chinook were caught under the quota system. A traditional derby style fishery accounted for 852 Chinook. The size limit was 67 cm. Barbless hooks and revival boxes were mandatory in the troll fishery. No troll test fisheries were conducted in the North Coast of B.C. in 2007.

Sport fishing was open with a daily limit of 2 Chinook and a possession limit of 4 Chinook. An estimated 54,000 Chinook were caught in the Queen Charlotte Islands sport fishery. A minimum size limit of 45 cm was in effect and barbless hooks were mandatory in the sport fishery.

Chinook ISBM Fisheries

Fisheries included in this category are commercial net fisheries throughout north and central BC, marine sport fisheries along the mainland coast and freshwater sport, and Native fisheries in both marine and freshwater areas. Under the PST, obligations in these fisheries are for a general harvest rate reduction (estimated in aggregate across fisheries) for ocean mixed-stock fisheries and for stock-specific objectives (i.e., achieving the escapement goal) in terminal areas.

North Coast commercial gillnet catches totalled 10,313 Chinook from Areas 3 to 6 (from fish slip catch data). Chinook catch in Areas 3 and 4 were 4,210 and 5,863 Chinook respectively. No Chinook were reported caught with gillnets from Area 5 and 240 Chinook were reported caught in Area 6. These preliminary estimates of gillnet catches include Chinook less than 5 pounds (graded as jacks and small red fleshed Chinook) not normally included for PSC accounting. Small Chinook typically make up less than 5% of commercial gillnet catches. A total of 1,302 large Chinook and 116 jacks were caught in the Tyee Test fishery on the Skeena River.

Johnstone Strait commercial fisheries including Area B seine and Area D gillnet was managed by South Coast and corresponding catches are reported in the South Coast section of this report.

Tidal sport catch from lodges operating in the Rivers Inlet, Hakai Pass and Bella Bella areas were estimated using log books. A total of 6,100 Chinook was caught, less than recent years. Detailed surveys of non-lodge (independent) anglers were not conducted in 2007 but catches by independent anglers are generally less that the lodge component. Creel surveys used to estimate catches of Chinook in Rivers Inlet by independent anglers averaged 334 Chinook between 2003 and 2005.

Tidal sport catches near the mainland coast of Northern BC were not estimated in 2007. The total catch for the 2007 NBC mainland sport fishery is unknown relative to the most recent estimate of 8,000 Chinook caught in 2002. Anecdotal information suggests that tidal effort has increased but Chinook abundance has decreased. No freshwater creel surveys were conducted in the North Coast in 2007. The sport catch from the Skeena River fishery (downstream of Terrace, B.C.) included 6280 Chinook in 2003 but local fishing opportunities were severely restricted in 2007 due to extensive flooding. 2007 Chinook catches were expected to be only a fraction of previous estimates (<10%).

Catches by First Nations in the North Coast exceeded 14,087 Chinook. Nisga'a and Gitanyow catches from the Nass River were 6,817 Chinook. Haida catches on the Queen Charlotte Islands were estimated at 2,130 Chinook. Only a portion of catches from Native fisheries in the Skeena have been reported but current estimates exceed 5140 Chinook. Chinook catch by First Nations on the Skeena appear to be less than 2006.

Catches by First Nations in the tidal portion of the Central Coast were reported as 194 Chinook while the non-tidal catch of terminal Atnarko River Chinook was 1,896 fish.

Overview of Northern BC Chinook Stock Status

Since assessments of the ISBM fisheries are relative to the escapements achieved in the Chinook indicator stocks, a brief overview of the 2007 returns is provided. Northern BC terminal runs were similar to 2006. Preliminary estimates of Nass River escapements decreased to 20,478. Skeena River Chinook escapements were estimated at approximately 33,352. The Yakoun River was the only indicator stock that remained stable with an estimated escapement of 5000 Chinook. Kitimat River Chinook escapements were not estimated in 2007.

Fraser River Sockeye

The sockeye run-size forecast for 2007 resulted in a preseason plan based on the 50% probability level of abundance (6.2 million) with a predicted diversion through Johnstone Strait of 30%. The pre-season plan also incorporated provisions to protect Early Stuart and Late Run stocks in addition to Cultus and Sakinaw Lake sockeye. The U.S. share of the annual Fraser River sockeye salmon total allowable catch (TAC), harvested in the waters of Washington State was set at 16.5% as per the PST Annex IV Chapter IV agreement. There were no catch overages of Fraser River sockeye from previous years to address. The panel adopted 50% probability level forecasts for all sockeye run timing groups for planning fisheries. The 2007 50% probability forecasts for the four management aggregates are as follows: Early Stuart 45,000; Early Summer 690,000; mid-Summer Run 3.4 million; and Late Run 2.1 million (of which 613,000 were Birkenhead type).

The forecast for Early Stuart was 23% of the cycle line average of 192,000 which was primarily due to low spawner abundance in the brood year (25% of average spawners to the grounds). The Early Summer forecast was 19% above the cycle line average of 579,000. The Summer run forecast was 40% larger than the historical average for this cycle (2,401,000). The larger than average forecasts for Early Summers & Summers reflect the large brood year escapements in 2003 (fourth largest for cycle since 1939 for both aggregates). The Late Run forecast was similar to the 2007 cycle average of 2,166,000. While concerns for early entry and the associated elevated rates of pre-spawn

mortality continue, conservation concerns for the Late run stocks were focused on Cultus Lake sockeye. The allowable exploitation rate of 20% for Cultus is higher than the 10-12% allowable rate in recent years (with the exception of 2006, when it was 25-30%) and was to be calculated based on the exploitation rate of co-migrating Late run stocks excluding the earlier migrating Birkenhead group and Harrison fish.

Late Run sockeye have historically delayed in the Gulf of Georgia for 4-8 weeks prior to entering the Fraser River. Beginning in 1996, this behaviour has changed to one where there has been shorter delay and occasionally immediate river entry. This unusual behaviour has been associated with high levels of en-route and pre-spawn mortality. Conservation objectives for Late-run sockeye and Cultus sockeye were instrumental in pre-season planning for 2007.

The pre-season plan made several assumptions, including:

- Late Run sockeye would continue their early migration behaviour with an associated en route mortality rate of 43%;
- that an eight day separation exists in the 50% marine migration timing between Summer run (August 8) and Late run (August 16) sockeye.
- that although the capability to assess in-season run size and migration timing would be good for Summer Run and Late Run sockeye, an in-season run size estimate for Cultus Lake sockeye would not be possible due to low abundance relative to co-migrating sockeye stocks so the harvest impacts on Cultus Lake sockeye would be assessed using other Late run stocks as a proxy; and
- that using Canada's escapement plan which varies escapement requirements as run size changes for all management aggregates would provide a more flexible approach to management than in recent years when Late run sockeye were managed to a fixed exploitation rate.

In past years, the Fraser River sockeye spawning targets were based upon a Rebuilding Strategy. Due to some shortcomings in this approach, the department adopted a new escapement strategy for Fraser River sockeye in 2005. The process of developing this new approach is known as the Fraser River Sockeye Spawning Initiative and has since been modified as a result of a series of consultation workshops in the spring of 2006. This approach was continued in 2007.

The Canadian fishing plan also addressed conservation specific-concerns for:

- Upper Fraser River/Thompson River coho
- Nimpkish River, Rivers Inlet & Smith Inlet sockeye
- Thompson River steelhead
- Lower Georgia Strait Chinook
- Mainland Inlet Pinks
- Inshore Rockfish

In-Season Assessment

The main challenge facing the Fraser Panel in 2007 was the return of Fraser sockeye at levels near or below the 90% probability level. A chronology of run size changes through the 2007 season is shown in the table below (shaded cells represent the time periods where there was no TAC for a given run timing group):

Date	E.Stuart	E.Summer	Summer	Birkenhead	L.Lates	*total soxi*	Pink
pre-season	*45,000*	*690,000*	*3,369,000*	*613,000*	*1,530,000*	*6,247,000*	*19,570,000*
27-Jul	**13,000**	*690,000*	*3,369,000*	*613,000*	*1,530,000*	*6,215,000*	*19,570,000*
03-Aug	13,000	**231,000** *	*3,369,000*	*613,000*	*1,530,000*	*5,756,000*	*19,570,000*
10-Aug	13,000 **	**150,000**	**1,261,000** *	*613,000*	*1,530,000*	*3,567,000*	*19,570,000*
13-Aug	13,000	**120,000**	**750,000**	**227,000** *	**504,000** *	*1,614,000*	*19,570,000*
17-Aug	13,000	**150,000**	750,000	227,000	**600,000**	*1,740,000*	*19,570,000*
21-Aug	13,000	150,000	**825,000**	227,000	**800,000**	*2,015,000*	*19,570,000*
24-Aug	13,000	**170,000**	825,000	**150,000**	800,000	*1,958,000*	*19,570,000*
27-Aug	13,000	170,000	**700,000**	150,000	**670,000**	*1,703,000*	*19,570,000*
31-Aug	13,000	**155,000**	**650,000**	**100,000**	**510,000**	*1,428,000*	**10,000,000**
14-Sep	13,000	155,000	650,000	100,000	510,000	*1,428,000*	**11,000,000**

bold indicates run size change

yellow cell indicates zero TAC available for the run timing group

* 90p forecast

** note that on 10-Aug, CDN was using the 75p forecast of 376k BK & 833k L.Lates for domestic planning purposes

The final in-season estimated returns of Fraser River sockeye compared to the forecasts used for pre-season planning purposes are shown in the table below:

Run Timing Group	Pre season forecast (50% probability forecast)	Final In-Season estimate of run size (14-Sep-2007)
Early Stuart	45 000	13 000
Early Summer	690 000	155 000
Mid-Summer	3 369 000	650 000
Late Run	2 143 000	610 000
Total Fraser sockeye	***6 247 000***	***1 428 000***

There were no commercial or recreational fisheries directed on Fraser sockeye in 2007 in either the US or Canada. There were limited sockeye directed FSC fisheries in Canada, and permitted retention of sockeye for ceremonial and subsistence purposes in Treaty Indian fisheries directed on pink salmon in US waters. There are on-going discussions between the US and Canada regarding the TAC calculations for 2007. Preliminary calculations indicate that the total TAC of Fraser sockeye in 2007 was 36,000 fish, all from the Summer run and Birkenhead type group. The US share of this would be zero.

The final in-season estimated proxy exploitation rate on Cultus Lake sockeye was estimated at 8%, compared to the pre-season allowable exploitation rate of 20%.

Fisheries

At the beginning of the season, harvest opportunities on Summers were limited at the front end of their migration by a closure to protect Early Stuart sockeye. As the season progressed, opportunities to harvest Summers became even more limited due to the low returns of Early Summer and Late run sockeye.

Sockeye-directed harvest opportunities on Summer run sockeye in Canada and the US were available only for Canadian First Nations' food, social, and ceremonial fisheries. The Fraser Panel allowed US ceremonial and subsistence fisheries directed on pink salmon late in the season to retain sockeye by-catch, even though the US had no sockeye TAC.

Preliminary estimates of Fraser River sockeye catch in 2007 are as follows:

Total Fraser Sockeye Caught	**234,900**
Test fisheries	33,900
Canadian Catch	**197,100**
Canadian commercial fisheries (includes commercial selective & FN economic)	0
Canadian First Nation FSC fisheries	197,100
Canadian recreational fisheries	0
United States Catch	**3,900**
U.S. Treaty Indian & non-treaty Indian fisheries	0
U.S. Treaty Indian ceremonial fisheries	3,900

The above numbers reflect the catch numbers provided by the PSC at the Fraser Panel post-season meeting on January 15, 2008.

Stock Status

Environmental conditions this summer were favorable for sockeye passage. Preliminary spawning escapement estimates compared to in-season escapement targets at the final in-season run size are shown in the table below. Also shown are the projected escapement estimates to the spawning grounds, which incorporates the escapement at Mission, minus the catch above Mission, and minus the final estimated difference between estimates, which is based on river conditions for Early Stuart, Early Summer and Summer run management groups and on the 50% date at Mission for Late run sockeye. A summary of preliminary spawning escapement estimates for Birkenhead and Late run sockeye will not be available until January, 2008.

Management Group	Escapement goal @ final in-season run size	Projected Escapement	Preliminary Spawning Esc.	PSM *
Early Stuart	13,000	6,300	5,346	14.0%
Early Summer	155,000	115,800	123,148	2.6%
Summer	600,000	335,700	431,570	3%
Birkenhead+	92,000	80,200		
L.Lates	415,000	235,800		
Total	***1,275,000***	***773,800***		

* pre-spawn mortality

It appears that the 2005 ocean conditions had adverse effects, not only on 2007 Fraser returns, but 2006 Interior Fraser coho returns, as well as four year old Chinook returns to the Fraser in 2007.

Fraser River Pink Salmon

The 50% probability forecast for Fraser pink in 2007 was 19,570,000 fish. The escapement target at this run size is 6,000,000. In-season estimates from test fisheries indicated that the return was 11,000,000. The U.S. share of the annual Fraser River pink salmon total allowable catch (TAC), harvested in the waters of Washington State was set at 25.7% as per the PST Annex IV Chapter IV agreement.

The Duncan Bar – Strawberry Island mark recapture program on Fraser Pinks has not been conducted since 2001, and the test fishery estimate will become the final run size estimate for 2007. Preliminary estimates of Fraser River pink catch in 2007 are as follows:

Total Fraser Pink Caught	**843,400**
Test fisheries	33,200
Canadian Catch	**432,600**
Canadian commercial fisheries (includes commercial selective & FN economic)	333,300
Canadian First Nation FSC fisheries	16,900
Canadian recreational fisheries	82,400
United States Catch	**377,600**

The above numbers reflect the preliminary catch numbers as of January 15, 2008. Canadian commercial fisheries catch is mainly from First Nations economic and demonstration fisheries, with only 1500 fish being caught by the Area H troll. The Canadian recreational fishery catch estimate only reflects the catch in marine waters. The recreational in-river catch estimate for pinks will be available in late January.

Southern B.C. Mainland Pink

This was an off year cycle for Mainland Inlet pinks. Expectations for 2007 were highly uncertain due to extremely variable returns through the historic time series. The survival trend for the 2005 returns was up from previous brood year in 2003. No directed commercial fishing opportunities were anticipated due to the uncertainty around the expectations and the average to below average return over the last 2 cycles (2003 and 2005).

The objectives for managing these stocks are to meet target escapement levels and when surpluses are identified, conduct fisheries terminally that minimize the by-catch of non target species following domestic sharing arrangements as set out in the 2007 IFMP.
As in 2005, the assessment plan entailed extensive visual coverage of the key Area 12 Mainland Pink systems.

First Nations

Fishing opportunities were not restricted; however there was no harvest in the terminal areas this year. There is normally very little effort on mainland inlet pinks in the terminal areas due to the availability of fishing opportunities in other more desirable locations and stocks in Johnstone Strait.

Recreational

Effort on these stocks in the terminal areas is very low. Daily bag limits were at normal limits of 4 per day.

Non-Tidal Sport

There are no targeted pink fisheries in non-tidal waters on Mainland Inlet pink stocks.

Commercial

There were no directed commercial fishing opportunities this year.

Stock Status

A fairly cautious approach to the in-season management was made for 2007 due to the high variability in the returns encountered over the recent years for these stocks. In keeping with plans for this year, there were no directed commercial fisheries on Mainland Inlet pinks. Preliminary assessments of the pink returns to the Mainland Inlet systems demonstrated similar to improved returns in relation to the 2005 brood year. Preliminary 2007 escapement estimates for some key systems in the Area 12 Mainland Inlets are: Kakweiken –34,000, Glendale –233,000, Ahnuhati –5,000, Kingcome (index clear

tributaries) –180 and Wakeman (index clear tributaries) – 740. These estimates are preliminary and are subject to change pending further post season analyses.

Unlike the reduction that was seen in 2006 relative to the 2004 brood year, returns in 2007 show some stability in regards to Mainland inlet pink abundance throughout the area.

Southern B.C. AABM Chinook Salmon

Chinook fisheries are managed by either an AABM (aggregate abundance-based management) or ISBM (individual stock-based management) regime. Allowable harvest impacts in AABM areas are determined by provisions in the Pacific Salmon Treaty (PST) and subject to domestic considerations, such as conservation and allocation. In Southern BC, all AABM Chinook fisheries are located off the WCVI, including the offshore recreational fishery, First Nations fisheries, and the WCVI Area G troll fishery.

For the period October 2006 through September 2007, the forecast Chinook abundance index was 0.75 of the PST base period. Therefore, under treaty provisions, the maximum allowable catch was 143,300 Chinook for WCVI AABM fisheries. Further considerations for managing Chinook catch in WCVI AABM fisheries are driven by concerns regarding the low status of natural WCVI and Lower Strait of Georgia (LGS) Chinook populations.

Ocean fisheries in Canada that intercept WCVI Chinook are limited to a 10% harvest rate, even if PST provisions allow for a higher catch. Measures are in place to reduce the impact of fisheries on WCVI Chinook while still providing harvest opportunities. For the WCVI sport, these include the 'slot limit' (designed to conserve larger egg-bearing females); maximum size limits, closed areas and increased bag limits in hatchery approach areas. Impacts in the WCVI troll have been reduced to near zero through time and area closures.

Post Season Preliminary Catch Estimates for 2006-2007 WCVI AABM Chinook Fisheries:

Fishery	Pre-Season	Post-Season
WCVI Abundance Index 0.90	0.75	na
WCVI AABM Chinook TAC	143,300	na
Offshore Recreational Catch	50,000	46,209
First Nations Catch	5,000	5,000
Area G Troll Catch	88,300	87,921
TOTAL AABM CATCH		**139,130**

Efforts were made in 2007 to reduce the marine harvest rate of fisheries that intercept low status Lower Strait of Georgia populations, such as Cowichan Chinook. Specifically, the WCVI troll was limited to a maximum allowable interception of Cowichan coded-wire tags (CWTs) in order to reduce the impact of the fishery. No further measures were introduced for the WCVI offshore recreational fishery.

Recreational

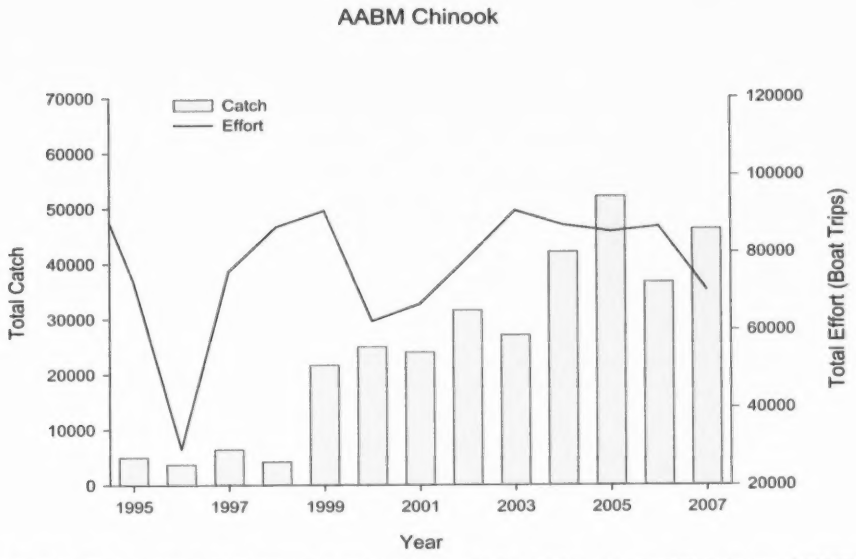
Fishing regulations in WCVI recreational AABM areas include barbless hook requirements to lower post-release mortality on sub-legal size Chinook less than 45 cm and a daily bag limit of two. Additional conservation measures include the '77 cm maximum slot limit', imposed within the 1-mile surfline corridor of the near-shore WCVI AABM to protect migrating WCVI origin Chinook. In more terminal in-shore areas, conservation measures include a combination of maximum size limits, Chinook non-retention areas and finfish closures depending on the level of concern for local stocks.

Catch in the WCVI recreational fishery is estimated through a creel survey, which collects two primary types of data. These are effort and catch per unit effort (CPUE). Catch for any given species within a defined time-area stratum is estimated by multiplying effort by CPUE. Total effort is estimated through vessel counts, gathered through either aerial or boat surveys of the fishing area. CPUE is estimated from interviews with anglers at specific landing sites and from trip logbooks and manifests submitted by guides through a voluntary monitoring program. Data regarding the daily activity profile of the fishery, fishing locations, and the proportion of guided versus un-guided effort are also gathered from angler interviews.

Creel observers conducted 12,517 fishing interviews at 17 landing sites from the beginning of June to the end of September during the 2007 salmon season. This level represents about 18% sampling coverage (based on unit effort, boat-trip) for the period.

Total recreational catch in the 2007 WCVI AABM fishery was approximately 46,200 Chinook during the survey period. There is some additional catch during winter fisheries that occurs in near-shore areas. However, catch is very low because inclement weather, smaller fish and low CPUE deters anglers. Previous sampling has indicated virtually no effort during this period.

The 2007 catch represents an increase of approximately 26% relative to 2006. However, total effort in AABM areas decreased by approximately 25%. The increase in catch is accounted for by higher catch per unit effort, particularly in Barkley Sound and PFMA Area 123. The decrease in effort is largely accounted for by the lack of sockeye recreational fishery in Alberni Inlet during the June and July AABM period. Effort in off-shore areas, where the majority of AABM Chinook are caught, was relatively constant compared to recent years.



WCVI Chinook AABM catch and effort, 1995-2007. Note effort is total WCVI sport effort, including AABM and ISBM fisheries.

Estimated WCVI recreational AABM catch and effort by PFMA, 2007.

	Area	Effort AABM	Chinook - AABM
Inshore	Port Renfrew (20, 21)	-	20
	Alberni Inlet (23)	560	650
	Barkley Sound (23)	6,260	9,030
	Clayoquot (24)	670	530
	Nootka (25)	170	-
	Kyoquot (26)	-	320
	Quatsino (27)	-	-
	Subtotal	7,660	10,550
Offshore	Area 121	3,040	6,140
	Area 123	9,180	18,050
	Area 124	2,080	3,990
	Area 125	1,770	2,130
	Area 126	610	990
	Area 127	1,960	4,350
	Subtotal	18,640	35,650
WCVI	Total	26,300	46,200

First Nations

The 2006/2007 First Nations AABM Chinook catch was estimated to be 5,000.

Commercial

After the completion of the 2007 CTC Chinook model calibration the AABM Canadian allowable harvest was 143,000. It was anticipated that the food, social and ceremonial harvest would be 5,000; and that the recreational catch would be 50,000; with 88,300 available for commercial harvest by Area G troll.

For the 2006/2007 Chinook year, fisheries continued to be shaped by conservation concerns for the following domestic stocks: spring-run timing upper Fraser River Chinook, upper Fraser River and Thompson River coho, WCVI origin Chinook salmon, and Lower Strait of Georgia (LGS) Chinook. The following management measures were used to protect these domestic stocks, excluding LGS Chinook which will be discussed below. To protect the early spring-runs of upper Fraser Chinook the WCVI troll fishery was closed south of Estevan Point (areas 123 and 124) between mid-March and mid-April. This closure also afforded protection to LGS Chinook. To protect local WCVI Chinook stocks, no fisheries were conducted in July and August, and September fisheries were conducted 5 nautical miles seaward of the surfline. To protect Thompson coho, coho non-retention remains in effect for the spring/summer period, coho encounter rates are monitored, and commercial fisheries are not open from late June until the end of August.

For LGS Chinook, the preseason management objective was to reduce the annual exploitation rate on LGS Chinook by 10% of the recent year's average from 2001/02 to 2005/06. A benchmark of approximately 50 coded-wire tags (cwts) was used as an in-season upper limit for Cowichan estimated cwt recoveries. Since only age 4 Cowichan Chinook (brood year of 2003) were available for recovery in 2006/07 (due to the hatchery failure of the 2004 brood year), the benchmark was reduced to 25 estimated cwts. From October 2006 to September 2007, a total of 4 observed Cowichan cwt were recovered, expanding to 18 estimated cwt, and therefore the preseason objective was attained. Management measures are being reviewed for 2007/08.

For all fisheries, selective fishing practices were mandatory, including single barbless hooks and "revival tanks" for resuscitating coho salmon prior to release. Size limits for the majority of the commercial troll remained unchanged for 2006/2007 at 55 cm (fork length). The AGHC recommended that the size limit be returned to 67 cm for the September fishery, The Department was not opposed to an incremental increase in size limit, but wanted to follow a precautionary approach to monitor the release rate in the fishery. Therefore, the minimum size limit for the September fishery only was increased to 62 cm fork length. The size limit will continued to be reviewed in consultation with the AGHC.

Since 1999, a major objective for the management of the WCVI troll fishery has been to distribute the catch throughout the fall-winter-spring-summer periods. This objective was continued in 2006/2007. See Table 1 for WCVI Area G troll fisheries during the 2006/2007 period.
Fisheries were also monitored to determine encounter rates of other species and released Chinook. Biological sampling was conducted for size distributions, and stock compositions (via CWT, DNA and otolith samples).

Southern BC Chinook ISBM

In addition to the PST regime, Canada implements management actions as required to ensure conservation of Canadian origin Chinook and meet domestic allocation requirements. These Chinook fisheries are managed to harvest rates on an individual stock basis (ISBM).

Measures were taken in 2007 to protect WCVI, Lower Georgia Strait (LGS) and upper Fraser River Chinook stocks. Specific management actions were taken to protect WCVI origin Chinook in Canadian ocean fisheries, the harvest of which was restricted to an exploitation rate cap of 10%. Most Southern BC commercial fisheries were regulated so that impact on WCVI Chinook stocks was minimized. Robertson Creek hatchery-origin Chinooks were harvested in the terminal area of Alberni Inlet by First Nations, recreational and commercial net fisheries. WCVI troll fisheries were closed from July until mid-September to protect local WCVI Chinook wild stocks. September fisheries were conducted 5 nautical miles seaward of the surfline. There were no troll fisheries in areas 23 to 27 during July, August, or September; and therefore there were no WCVI ISBM troll catches in 2007.

LGS Chinook stocks are in a period of low productivity requiring increased measures in 2007 to further protect them. Recreational non-retention areas were implemented in the Gulf Islands, near Cape Mudge and near Powell River to reduce impacts at critical times and in key areas. Commercial retention of Chinook was again not permitted in seine fisheries and incidental non-retention was implemented in all inside (Area H) troll fisheries. Commercial gill nets were again permitted to retain incidental dead Chinook while releasing those that were alive.

In addition to these specific restrictions, area and time closures were in place to protect returning upper Fraser Chinook stocks during sport and commercial fisheries. There was a general requirement to apply selective fishing techniques, including area and gear restrictions and the mandatory use of revival tanks in all commercial fisheries. Catch monitoring included requirements for daily catch reporting, mandatory logbooks, hailing catches on a regular basis, and independent on-board observers on vessels when requested. Post-release mortality information for Chinook included in ISBM management was determined from studies conducted in 2000-2001 and detailed in the Canadian Stock Assessment Secretariat, Research Document 99/128 (CSAS, Doc 99/128).

Preliminary Chinook estimate of the recreational, First Nation, and commercial ISBM catch and releases for 2007.

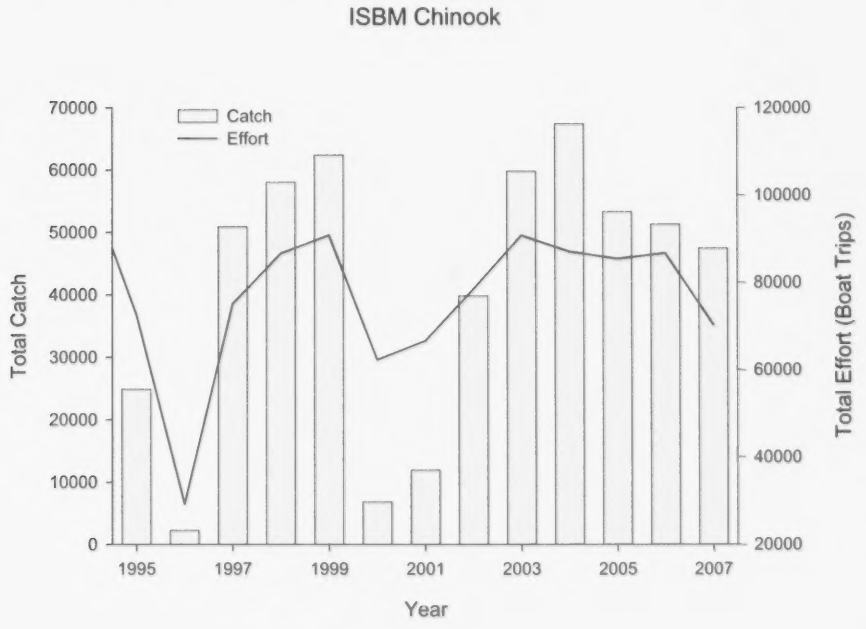
	Catch	Release
ISBM Recreational	88,663	56,570
ISBM First Nations	20,298	na
ISBM Commercial	26,813	451
Total	135,842	57,021

Recreational

West Coast Vancouver Island

The WCVI ISBM Chinook sport fishery is regulated using "over/under" size limits, bag limits and area closures to reduce impacts of the recreational fishery on natural (un-enhanced) WCVI Chinook stocks. Bag limits are two Chinook per day. Retained fish must have a minimum fork length of 45cm and retention of only one Chinook greater than 77cm is permitted. Area restrictions include areas "closed to salmon fishing" or "closed to all fin fishing", depending on the vulnerability of local stocks of concern.

Total recreational catch in the 2007 WCVI ISBM fishery was approximately 38,630 Chinook during the survey period. The 2007 catch represents a decrease of approximately 7% relative to 2006 and total fishing effort in WCVI ISBM areas decreased by approximately 10%.



WCVI Chinook ISBM catch and effort, 1995-2007. *Note effort is total WCVI sport effort, including AABM and ISBM fisheries.*

Area	Effort ISBM	Chinook - ISBM
Alberni Inlet (23)	9,449	11,317
Barkley Sound (23)	9,138	8,980
Clayoquot (24)	1,172	184
Nootka (25)	14,323	14,369
Kyoquot (26)	731	2,178
Quatsino (27)	2,259	1,604
Total	37,071	38,632

Inside Areas: Strait of Georgia, Johnstone Strait, and Juan de Fuca Strait

For Johnstone Strait and the Strait of Georgia north of Cadboro Point, sport catch regulations included an annual bag limit of 15, a daily bag limit of two and a size limit of 62 cm. For the Canadian portion of Juan de Fuca Strait south of Cadboro Point, the daily bag limit was two Chinook over 45 cm and a seasonal limit of 20 were in effect.

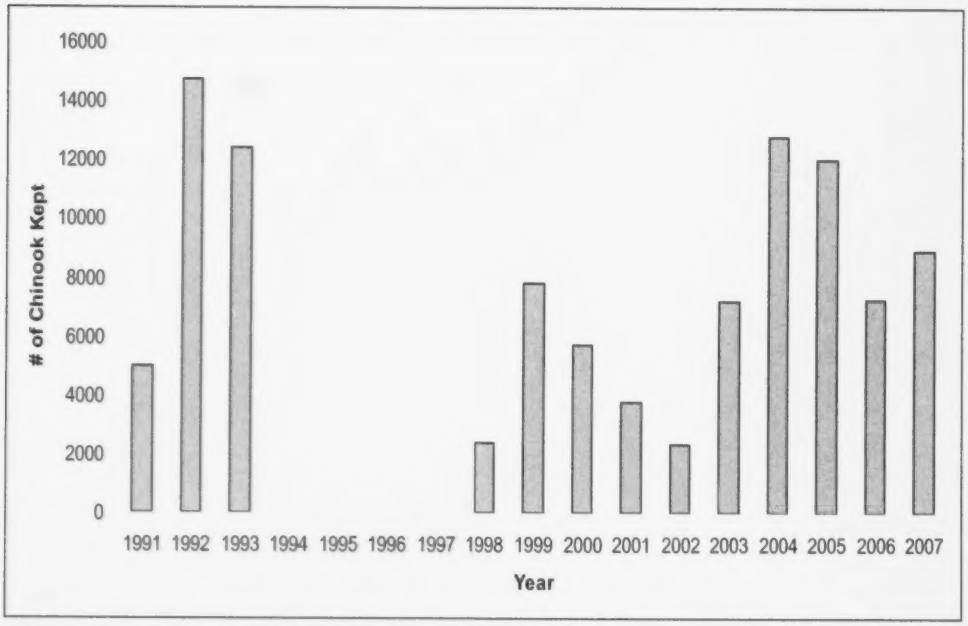
The catches in these marine fisheries are monitored by creel surveys in three main areas; 1) Juan de Fuca including Victoria and Juan de Fuca Strait through PFMA 20-1; 2) Strait of Georgia and 3) Johnstone Strait. Monitoring of the Strait of Georgia fishery (April to October) and Juan de Fuca Strait sport fishery (January to December) has been fairly consistent from year to year using an access point (landing site) survey for collecting catch, CPUE, and biological information combined with an aerial survey for effort counts. In 2007, the Strait of Georgia creel survey was conducted between May and October (Area 13 creel was initiated in April). The Juan de Fuca creel survey was conducted from January to December. The Johnstone Strait creel survey was conducted during the July and August recreational fishery in Areas 11 and 12 and utilizes the same methodology as the Strait of Georgia creel survey.

The overall effort in Strait of Georgia remained the same with a small increase over 2006 of only 1%. The Chinook catch however, increased by 20% from 2006, largely on the basis of increased catch and effort in the Sunshine Coast, Courtenay and Nanaimo areas. Juan de Fuca Strait effort increased by 3% overall and catch remained the same compared to 2006. As part of these creel surveys, encounter rate information was also collected for legal and sub-legal Chinook and coho. Releases of Chinook in the Strait of Georgia and Juan De Fuca Strait were significantly higher in 2007.

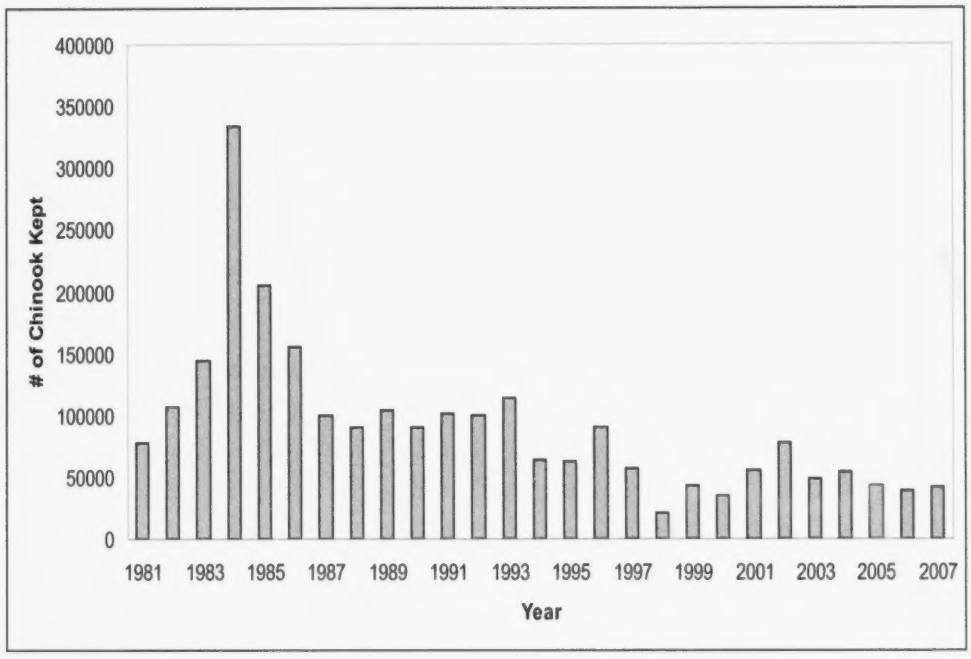
2007 Catch and Effort for Inside Recreational ISBM Fisheries.

Fishing Area	Survey Period	Chinook Kept	Chinook Released	Effort (Boat Trips)
Georgia Strait	Apr - Oct	14,561	25,595	63,248
Johnstone Strait	Jul - Aug	8,922	5,814	17,905
Juan de Fuca Strait	Jan-Oct	26,549	11,832	54,618
* Fraser River	May - Oct	10,723	3,430	n/a
TOTAL		**50,032**	**43,241**	**135,771**

*Effort was calculated in hours (214,075 hours) for this fishery and was standardized to boat trips; boat trips being a 3.5 hr average, to be comparable.



Johnstone Strait ISBM Chinook catch, 1991-2007.



Strait of Georgia / Juan de Fuca ISBM Chinook catch, 1981-2007.

First Nations Fisheries

Food, Social, and Ceremonial (FSC) and Economic Opportunities (EO)

WCVI FSC and Economic Opportunity Fisheries

An agreement was reached in 2007 with the Hupacasath and Tseshaht First Nations for an economic fishery targeting Somass Chinook (Area 23). Hupacasath and Tseshaht First Nations harvested 19,348 Chinook in upper Alberni Inlet.

The Ditidaht First Nation harvested 750 Chinook in Nitinat Lake (Area 22). FSC catches of Chinook by other WCVI First Nations are unknown, and assumed small.

Strait of Georgia FSC Fisheries

Data is still being compiled on various First Nations catches in the Strait of Georgia and catch estimates are not available at this time.

Fraser River FSC and Economic Opportunity Fisheries

Food, Social and Ceremonial fisheries, as well as economic opportunity fisheries took place in the Fraser River in 2007 harvesting ISBM Chinook in the both the upper and lower reaches of the Fraser River. Approximately 4,168 Chinook were harvested by First

Nations in the upper river FSC and EO, and approximately 16,828 Chinook were harvested in the lower river.

Commercial Fisheries

In 2007 several commercial fisheries targeted ISBM Chinook including gillnet and seine fisheries in Alberni Inlet, and gillnet fisheries in Tlupana Inlet.

Area B seine fisheries occurred on August 27-28, September 4-5, 10-12, and 17-18 in upper Alberni Inlet targeting Somass Chinook. Twenty vessel days were fished during these openings with a total Chinook catch of 4,041 Chinooks.

Area D gill net fisheries occurred on August 20, 21, and 26 and September 3 in upper Alberni Inlet (Area 23) targeting Somass Chinook. On average 82 vessels participated in each of the four openings. The total Area D gill net Chinook catch was 16,671.

Area D gill net fisheries occurred on August 07, 14, 26, 28 and September 3, 4 in Tlupana Inlet (25) targeting Tlupana Chinook. The total Area D gill net Chinook catch in Tlupana Inlet was 6,101.

Chinook catch and release information from all fisheries can be found in **Table 2.**

Stock Status

Fraser River and Area Chinook

Interior Fraser

All early spring Chinook returns were very poor. Spius and Coldwater and upper Chilcotin all had critically low returns of fewer than 200 spawners. Most escapements for the upper river and later lower Thompson spring populations were well below their parental brood escapements (i.e. Nicola R~950 spawners from a parental brood of over 14,500). On average, the five year old upper river stocks returned at about 25% of parental brood escapements while the four year old Thompson stocks returned at an average of only 11% of the parental brood. Spawning and counting conditions were good.

Yearling summer Chinook returns were also poor and below brood escapements. Returns averaged only 30% of parental brood for the stream-type stocks (Chilko ~4,400, Quesnel ~1,750, and Nechako ~1,800). In contrast, the late South Thompson ocean-type aggregate was strong again, averaging ~130% of brood escapements. South Thompson had escapement of just under 60,000; and, Lower Adams (3,200) and Little River were also well above parental brood levels (`7,300).

Lower Fraser

Spring-run: With the exception of Birkenhead, returns of Lower Fraser Spring Chinook continue to be poor. Returns to Birkenhead (~1,950) were strong, exceeding the parental brood escapement of 463. Visual surveys of the escapement to the upper Pitt and Big Silver rivers were also conducted in 2007. Preliminary estimates of adult Chinook escapement to these two systems are poor at only 138 and 62, respectively.

Information for other populations is unavailable at this time.

Summer-run: Summer-run Chinook returns to Maria Slough were assessed visually in 2007. The escapement of ~650 is an improvement from the previous two years; however it is still lower than the parental brood estimate of 823. Information for other summer populations is not available yet.

Fall-run: Annual lower Fraser River fall-run Chinook stock group escapements are, on average, large (>100,000). The major contributor and principal focus of assessment of this stock group is Chinook returning to the Harrison River, and Harrison River transplants to the Chilliwack River. Both the Harrison and Chilliwack River escapement assessments are complete however analyses are ongoing. Extreme rain events have significantly raised water levels in these systems making in-season assessments problematic. Preliminary escapement estimates are 78,800 adults to Harrison and 40,500 to the Chilliwack River. Preliminary estimates of jack returns to both systems are high (>32,000 to Harrison), indicating a potentially strong cohort resulting from the 2005 escapement.

Howe Sound/Squamish River:

No information is available at this time.

Burrard Inlet:

Returns to Capilano Hatchery (i.e. swim-ins) are greatly affected by water level in the river. Early November rains allowed fall-run Chinook access to the hatchery; swim-in counts at the hatchery were 473 adults and 841 jacks (~740). The observed adult swim-in returns are below the numbers seen in the previous three years.

Boundary Bay:

Escapement data are unavailable at present.

Strait of Georgia Chinook

Spring/Summer Stocks:

Of the three early runs in Georgia Strait, assessment data are available for Puntledge and Nanaimo; the Cowichan summer run still exists but it is small and quantitative data are not available for that stock. Efforts to recover Puntledge summers to viable levels have resulted in improved returns to the river since 1999. The 2006 and 2007 escapements were approximately 1,000 adults, which is down from the record high in 2005 of approximately 2,500 adults, but substantially higher than escapements recorded in the previous decades. Of concern is the exploitation rate which climbed sharply from a low of approximately 30% in 2001 to 55-60% in 2003-2004. Nanaimo spring and summer Chinook abundances are poorly known but appear to be stable at a much lower level than seen in the 1970's.

Fall Stocks:

Total returns to Vancouver Island streams north of Nanaimo, virtually all of which are enhanced, have been stable for the last six to nine years (Puntledge and Englishman) or seventeen years (Big Qualicum and Little Qualicum). In general, all have had recent escapements near or above target. On the mainland side of the northern Strait of Georgia, Sliammon and Lang hatcheries continue to have variable returns. There are a few very small wild populations remaining in Theodosia River, Skwakwa, and Jervis Inlet, where assessment data are poor or non-existent. Typical spawner counts are less than 20. A large proportion of the Chinook stock aggregate north of Nanaimo migrates into central and northern BC and Alaska. Exploitation rates on this stock aggregate have gradually been reduced over the last 15 years, thus the stable trend in annual returns to rivers over this period suggests a reduction in marine survival.

South of Nanaimo, returns to the Nanaimo River have also been generally stable since 1995 at slightly higher levels than those recorded back to 1975. The area of most concern is further south, where Chinook stocks returning to the Chemainus, Cowichan, and Goldstream Rivers have experienced continued declines. Unlike the central and northern Strait stocks, these southern populations historically rear within Georgia Strait. However, there appears to be an increasing proportion rearing off the west coast of Vancouver Island. In particular, Cowichan River Chinook (an indicator stock) has been in decline since 1995-1996. The status of this population continues to be a stock of concern. The 2007 return was further diminished by the loss of the 2004 brood year production at the Cowichan River Hatchery. Exploitation rates on Cowichan Chinook were historically high (averaging 80-90%), declined to a low of 34% on the 1995 brood

year, and then have steadily increased to 75% on the 2000 and 2001 brood years. Various harvest restrictions have been put into effect over the last 20 years to reduce exploitation on Strait of Georgia Chinook. Additional conservation measures were introduced in 2005 to reduce the harvest of Cowichan Chinook by the Strait of Georgia sport and WCVI troll fisheries. First Nations harvest of Cowichan Chinook has been substantially reduced in recent years. The declining returns to various southern Georgia Strait rivers are attributed to high exploitation rates, a drastic decline in marine survival, and in some cases, freshwater habitat issues.

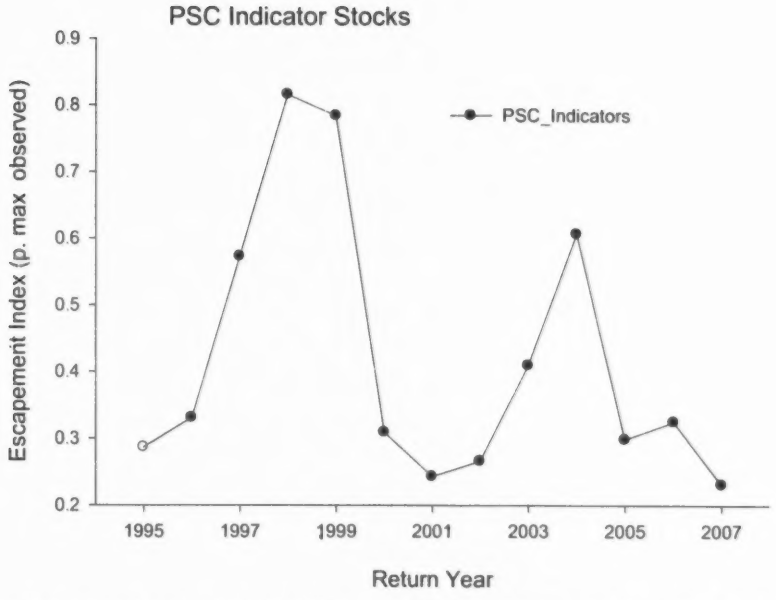
West Coast Vancouver Island Chinook

All salmon escapement estimates from extensively surveyed WCVI streams are preliminary. However, observations indicate escapement to most natural Chinook systems decreased in 2007 relative to 2006 in the WCVI area. Particularly low escapements were observed in Clayoquot Sound (Area 24) and in the Nahmint River (Area 23). In two un-enhanced systems in Clayoquot Sound (Megin and Bedwell-Ursus) less than 50 spawners were observed. In the Nahmint River only about 150 spawners were observed and no broodstock were collected to support the stock enhancement program there.

Preliminary data suggest that lower escapements in 2007 are at least partially explained by extremely unfavourable ocean conditions during the 2005 sea-entry year. Smolts that entered the marine environment in 2005 returned as 3-year old adults in 2007 and very few 3-year olds were observed. This observation suggests that the return of 4-year olds and 5-year olds will also be extremely low in 2008 and 2009, respectively. Areas and systems with particularly low escapement in 2007, such as Clayoquot Sound and Nahmint River, were also likely limited by a low return of 5-year olds due to low numbers in the corresponding 2002 brood year.

For WCVI hatchery stocks, the terminal return is defined as total catch (First Nation, recreational and commercial) in the in the near approach areas of the hatchery plus escapement (brood collection plus natural spawners). In these approach areas, catch is dominated by the hatchery stock (e.g. >95%) therefore higher exploitation rates are permitted than in times and areas dominated by naturally produced WCVI Chinook stocks. Returns to hatchery systems were less than expected and decreased on average by about 40% in 2007 relative to 2006. Similar to natural stocks, this decrease seems mostly explained by the extremely low survival of the 2004 brood that returned in 2007 as 3-year old adults as production levels for the contributing broods were similar.

The total terminal return of Stamp River/Robertson Creek hatchery Chinook was approximately 81,000 adults, about 23% less than forecast. Escapement through Stamp Falls was approximately 17,000 adult Chinook and 2,000 jacks. The total terminal return and escapement to the Conuma River hatchery system was approximately 30,500 and 8,600, respectively. The total terminal return and escapement to the Nitinat River hatchery system was approximately 9,000 and 7,600, respectively.



Index abundance of WCVI Chinook PSC indicator stocks. The index expresses the current year escapement relative to the maximum observation from the 1995-2006 period.

Johnstone Strait/Mainland Inlet Chinook

Currently only 2 systems are monitored in Areas 12 and 13 with some level of consistency. The Nimpkish River is monitored using standardized swim surveys and stream walks by the hatchery staff. The Quinsam hatchery staffs conduct an intensive mark-recapture program to estimate escapement on the Quinsam/Campbell system. Other systems are covered using intermittent visual surveys.

Nimpkish River:

Preliminary observations from the swim surveys indicate a continued reduction in abundance of Chinook to the Nimpkish Watershed relative to past years. At this time approximately 60% of the brood target has been obtained by the hatchery. Final estimates are not available.

Quinsam/Campbell:

The deadpitch has concluded for the year. Due to high water levels in both of the river systems early in the season, migration of fish into the Quinsam was initiated approximately one week earlier then average timing. Due to continual high water levels as a result of several large rainfall events between September and late November, fish spent very little time residing in the lower Quinsam. As a result, the floating fence was not installed and no brood stock seining occurred in the Quinsam in 2007, which is a first in a very long time. Also, deadpitch operations were hampered by the quick escapement of adult salmon to the hatchery and above. Abundance estimates are not available at this time; however

preliminary indications suggest that the total return decreased from 2006 but remains above historical averages. As well, due to the differing river conditions, a larger percentage of fish utilized the Quinsam River instead of the Campbell River proper. The brood stock goal of spawned fish (860 males, 868 females, and 6 jacks) was attained.

Southern BC Coho

The forecast of 2007 abundance indicated that the status of interior Fraser River coho remained critically low. The lower Fraser, Georgia Basin (east and west), and the Johnstone Strait coho management units were all forecast to be of low status. WCVI coho were forecast to return poorly but there was no suggestion of a trend and their status was considered to be low.

In 2007, interior Fraser coho were a primary concern in implementing fisheries. Under the Abundance Based Management provisions in the Pacific Salmon Treaty, the US was limited to a maximum 10% exploitation on interior Fraser coho. In Canada, the management objective for these coho in 2007 was to limit the total mortality to a ceiling of 3% across all Canadian fisheries. The total exploitation on interior Fraser coho was therefore limited to a maximum of 13%.

To ensure this limit was not exceeded in Canadian fisheries, non-retention of wild "unmarked" coho was required in many sport and commercial fisheries operating in areas of southern BC where Thompson River coho were known to be prevalent. Terminal areas along the west coast Vancouver Island (WCVI) and also a small portion of upper Johnstone Strait and Queen Charlotte Strait for a short time period were permitted wild coho retention (1 wild coho retention was permitted in Area 11 and upper Area 12 from June 15 to Aug 2). The only non-terminal fishery where coho retention was permitted was WCVI, where the Area G troll fishery retained hatchery coho in late September 2007.

Post-release mortality rates were based on studies conducted in 1999-2001 and detailed in the Canadian Stock Assessment Secretariat, Research Document 99/128 (CSAS, Doc 99/128). The mortality rates for legal size coho by gear type were: Seine 25%; Gillnet North 70% and South 60%; Troll 26%; Sport 10%

Preliminary coho catch and release estimates of the recreational, First Nation, and commercial fisheries for 2007. (also see Table 3)

	Catch	Release
Recreational	58,567	75,211
First Nations	500	
Commercial	6,243	13,867
Total	65,310	89,079

Recreational

Sport fisheries can be categorized as occurring in mixed stock areas where specific coho stocks (such as Thompson River coho) could not be avoided and terminal areas where local stocks dominate the catch. The table below outlines the areas in Southern BC where these mixed stock fisheries occurred and the general regulations pertaining to them.

Southern BC coho fishery regulations.

Mixed stock fishing area	Daily Limit (marked or unmarked)	Size Limit	Coho Season
WCVI offshore areas 121-127	2 marked	30 cm.	Jun 1 – Sept 14
WCVI offshore areas 121-127	4 marked	30 cm.	Sept 15 – Dec 31
WCVI inshore area 21-27	2	30 cm.	Jun 1 – Sept 14
WCVI inshore area 21-27	4, only 2 wild	30 cm.	Sept 15 – Dec 31
Juan de Fuca: areas 19-20	2 marked	30 cm.	Jun 1 – Dec 31
Strait of Georgia: areas 13-19, 28, portions of 29, excluding terminal closures.	2 marked	30 cm.	July 27 – Dec 31
Johnstone Strait – Queen Charlotte Strait: all areas	2 marked	30 cm.	Jun 20 – Dec 31

The table below outlines coho catch and release information for recreational coho fisheries in Southern BC. The WCVI coho fisheries had a boundary in place distinguishing coho catch in the mixed-stock fishery (outside the coho boundary) and catch in the terminal area (inside the coho boundary).

2007 catch and release for the recreational coho fishery in Southern BC.

Area	Coho Kept	Coho Released	Effort (Boat Trips)
WCVI – Outside Coho Boundary	25,334	37,652	26,306
WCVI – Inside Coho Boundary	18,098	8,591	37,073
Strait of Georgia	1,955	10,561	63,248
Fraser River	8,069	10,382	NA
Juan de Fuca	6,714	12,185	54,618
Johnstone Strait	6,466	6,223	17,905

Mixed stock areas

In 2007, hatchery selective mark fisheries (SMF) remained the same as 2006. Fisheries in southern BC allowed hatchery coho retention in SMF starting June 1 in most areas. Release of wild "unmarked" coho was required in all sport fisheries operating in areas of southern BC where Thompson River coho were known to be prevalent, including the

mixed stock areas of the WCVI (Statistical Areas 21-27, 121-127), Strait of Juan de Fuca (Statistical Areas 19-20), Strait of Georgia (Areas 14-19, 28, 29), and the majority of Johnstone Strait and Queen Charlotte Strait (Statistical Areas 11, 12 and 13). Some wild "unmarked" retention was provided in Area 11, 12 and 13 with catch limit, time and area constraints (Details in Pacific Region Integrated Fisheries Management Plan, Salmon Southern B.C. 2007). In addition, the use of barbless hooks was mandatory in all these areas

West Coast Vancouver Island:

In offshore and rearing areas off the WCVI, SMF regulations are in effect in order to protect weak coho stocks of concern, such as those originating from the Interior Fraser River. The daily bag limit is 2 marked coho (i.e. hatchery-origin coho with an adipose clip). For 2007, total catch in offshore areas was estimated at 25,334, an increase of approximately 200% over 2006 levels. This increase was likely due to an increase in coho abundance as effort levels were fairly constant relative to previous years.

Inside Areas: Strait of Georgia, Juan de Fuca Strait, and Johnstone Strait:

Recreational catch monitoring occurs year-round in portions of the Strait of Georgia but operates mainly from May-October. Coho catch, releases, and mark rates are derived from two main sources; creel surveys and guide logbooks. The total coho catch in Strait of Georgia mixed stock and terminal areas was approximately - Georgia Strait – 2,000, Juan de Fuca Strait – 6,700, Johnstone Strait – 6,500. More details about the recreational coho catch for individual fisheries in the Strait of Georgia are provided in Table 3.

Terminal Fishing Areas

West Coast Vancouver Island:

In WCVI terminal fishing areas, retention of adipose clipped hatchery origin coho was permitted as well as retention of wild "unmarked" coho in some portions of inshore areas where WCVI origin stocks dominate (portions of Port San Juan (Area 20), Alberni Inlet and portions of Barkley Sound (Area 23), portions of Clayoquot Sound (Area 24), portions of Nootka Sound and Esperenza Inlet (Area 25), and portions of Quatsino Sound (Area 27)). Where wild retention was permitted, the seasonal daily bag limit was 2 "unmarked" coho after June 1 with the exception of Alberni Inlet where the bag limit was increased to 4 "unmarked" coho after August 1. In 2007, the total coho catch from the inshore WCVI terminal area was approximately 18,100, an increase of approximately 400% over 2006 levels. This increase was likely due to an increase in coho abundance as effort levels were fairly constant relative to previous years.

Strait of Georgia:

Terminal coho SMF were implemented in some areas in the Strait of Georgia in 2007 where impacts on other species or stocks were not a concern. In some of these areas special management actions, including changes in daily bag limits or size limits, were implemented depending on the situation.

Non-Tidal Recreational Fisheries

Strait of Georgia:

During 2007 there were non-tidal openings throughout the Strait of Georgia. Areas which have been surveyed in previous years, but were not monitored in 2007 include: Big Qualicum River; Puntledge River and Chapman Creek. Nanaimo River was monitored in 2007; however a catch estimate is not available at this time.

Johnstone Strait:

In Johnstone Strait, non-tidal openings for coho were initially available on the Campbell/Quinsam River from October 1st to December 31st where 1 hatchery marked Coho was permitted in addition to jacks.

Low water conditions persisted until late October in small to medium rivers in southern BC requiring fisheries managers to place fin fish closures in many systems to protect returning spawning salmon.

West Coast Vancouver Island:

During 2007 there was a non-tidal opening for the Somass/Stamp Rivers (Area 23-1) open from August 25, 2007 to December 31, 2007. The daily limit is four salmon per day. Anglers were allowed to retain two coho (marked or unmarked) and two Chinook (of which only one may be greater than 77cm in length). The Somass/Stamp Rivers were not monitored by creel survey during 2007.

First Nations

Somass Economic Opportunity Fishery

Tseshaht and Hupacasath Bands both signed a Fisheries Agreement for Chinook, Coho and Chum in 2007. While there were no directed coho fisheries, coho by-catch in the Chinook and chum fisheries totalled approximately 800 coho.

Lower Fraser

Coho catches in the Lower Fraser River are reported to be 1,345 kept and 6,373 released through December, 2007.

Cowichan

Cowichan Tribes traditionally have a dip-net fishery on the Cowichan River. The fishery is currently underway and could continue through to the end of December 2007. A preliminary catch estimate will be available once the fishery is complete.

Nanaimo

FSC fisheries are not directly monitored in-season but are reported to DFO post season. There is a small hook and line and net fishery that takes place between mid August and

late November. Catch totals are generally less than 1000. Catch estimates will be available once the AFS reporting for the area is complete.

Qualicum

Data is still being analyzed and catch estimates are not available at this time.

Commercial Fisheries

In 2007 Southern BC commercial fisheries were generally regulated so that impacts on coho, and especially Thompson coho stocks, were minimized. Terminal opportunities to retain coho by-catch during directed Chinook fisheries were available to Area B seines and Area D gillnets in Alberni Inlet. In Tlupana Inlet directed Chinook fisheries were available to Area D gillnets.

Area B commercial seine fisheries occurred on August 27, 28 and September 4,5, 10,11,12,17, and 18th in upper Alberni Inlet targeting Somass Chinook. 20 vessel days were fished during these openings. The total coho by-catch was 3,755.

Area D commercial gillnet fisheries occurred on August 20,21, and 26th and September 3rd in upper Alberni Inlet (23) targeting Somass Chinook and September 25, 26, October 2, 3, 9,10, 16, 17, 23, 24, and 25 in an 8 vessel exploratory fishery targeting Barkley Sound Chum. Fishers were allowed to retain incidentally caught coho salmon. The total coho catch was 323.

Coho retention was permitted in the Area D Nootka and Esperanza chum gillnet fisheries and the Tlupana Chinook fishery. The total catch in these fisheries was 623 coho.

Area G troll fisheries were permitted to retain incidentally caught hatchery-marked coho in the October 2006 and September 2007 AABM fishing periods. The total retained preliminary estimate was 1,705 (260 in October 2006, and 1,445 in September 2007.)

Stock Status

Upper Fraser

While field programs to estimate escapements have just concluded, analysis is underway, and only preliminary results are available. Early returns to the Interior Fraser were better than recent years, and likely exceeded the 2004 brood year escapements. Preliminary data indicate returns to the entire interior Fraser may range between 50,000 and 55,000, however near final estimates will not be available for another month. Escapements were strong in the more northerly systems and record numbers (>5,000) were counted in McKinley Creek, a tributary to the Horsefly River. Escapements were also estimated to be strong in the Upper Adams and some tributaries of the Upper North Thompson. Conversely, several South Thompson populations and the Nahatlatch River failed to achieve parental brood escapement levels.

Lower Fraser

The Lower Fraser Area (LFA) can be divided into four sub-areas: lower Fraser River, Howe Sound/Squamish River, Burrard Inlet and Boundary Bay. In addition to Science Branch funded projects, assessment data for these sub-areas come from a variety of sources, including Aboriginal Fisheries Strategy (AFS), community-run, and Oceans, Habitat Enhancement Branch's (OHEB) major Salmonid Enhancement Program (SEP) facilities (e.g. Chilliwack Hatchery).

Lower Fraser River:

Adult coho returns to the Lower Fraser wild indicator, the Salmon River in 2007 are from the brood of the 2004 escapement. Escapement studies are still underway. To early-January, 713 adult Coho and 54 jack Coho were counted through the fence. Early preliminary escapement estimates are ~2,000 adults and ~200 jacks, well below the previous five year average escapement for the Salmon River, which is approximately 4,300 adult Coho.

A complementary hatchery coho indicator stock is provided by OHEB's Inch Creek Hatchery. Adult escapement is assessed annually and marine survival and exploitation rates are calculated. Escapement is not complete however, returns to the end of December are just over 1,400, and an additional 317 carcasses recovered around the facility. Adult Coho visual surveys are conducted by on a number of systems within the lower Fraser River sub-area as part of multi-species assessments; however estimates are not yet available as the programs are incomplete.

Howe Sound/Squamish River:

Assessments are incomplete at this time. Tenderfoot hatchery staff will be taking broodstock until February, 2008.

Burrard Inlet:

An assessment of the returns to Capilano Hatchery is not complete, so the 2007 abundance and status of this stock group is not known at this time.

Boundary Bay:

Community-run SEP projects contribute significantly to coho returns to this sub-area. Limited assessments were conducted by assessment staff prior to 2005. Current year data will not be available until late February 2008.

Strait of Georgia

2007 Forecast:

The 2006 returns in the Strait of Georgia were among the lowest recorded. Observed marine survivals at Quinsam and Big Qualicum Hatcheries were 0.2% and 0.1%, respectively, and the wild indicator at Black Creek has a marine survival of 1.5%.

The 2007 forecast for the indicators was for slightly better survivals (0.1% – 0.4% for hatcheries and 2.0% for wild) than the previous year however these levels are still extremely low. This forecast is based on time series models. Alternatively, the Catch-per-unit-effort model, which is based on catches of young hatchery origin coho in the Strait of Georgia, indicated an increase in the marine survival to 2.5%.

Hatchery:

The 2007 coho escapement into the Big Qualicum River was 4,114 as of 21 November. This is higher than the last two years but well below the 1990-2006 average of 26,700. Similarly, the escapement into the Puntledge River was 2,752 which is less than the 1990-2005 average of 11,400.

Wild Indicators:

There are two wild indicators in the Strait of Georgia, at Black Creek and Myrtle Creek.

Myrtle Creek:

The Myrtle count was hampered by the rain on snow event in late November. The fence panels had to be removed, thus allowing unimpeded access to the system. At that time three coho (two males and one female) had been enumerated, with three more adult coho holding downstream for a minimum count of six adults.

Black Creek:

Adequate discharge due to a large rainfall event starting on the evening of Sept. 29 facilitated adult coho migration by Oct 1. Water levels remained high throughout the season with the exception of a couple of days in early November when the adult fence was operational. Three pulses of fish migration, two in October (one early and one mid) and another in mid November made up the bulk of adult coho escapement to Black Creek in 2007. A total of 4,322 coho were enumerated through the fence of those 1815 (42%) were male, 2060 (48%) were female, 87 (2%) were jacks, and 360 (8%) were unknown. The deadpitch program commenced on Oct 30 and recovered a total of 484 carcasses. Both fence enumeration and deadpitch programs have been concluded for the year.

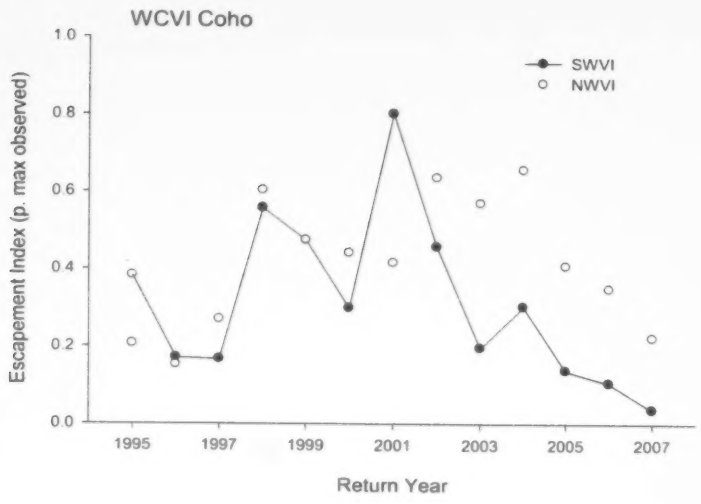
Wild Escapements:

Stream enumeration is under way in a small number of systems in the Strait of Georgia. Coho spawner enumeration has started in the Cowichan River but results will not be available until January 2008.

West Coast Vancouver Island

All salmon escapement estimates from extensively surveyed WCVI streams are preliminary. However peak live plus dead observations indicate escapement to most natural coho systems decreased in 2007 relative to 2006 in the WCVI area. In contrast, escapement to the Stamp River/Robertson Creek Hatchery system and the Carnation Creek wild indicator stock (Area 23) increased to moderate levels in 2007. In addition, recreational coho catch in WCVI fisheries increased in 2007 relative to 2006. Pending further analysis of catch composition in order to estimate total return, the status of coho

returns in 2007 to WCVI populations is low to moderate based only on preliminary escapement observations.



Index of abundance of WCVI coho stocks for south west Vancouver Island (SWVI) and north west Vancouver Island (NWVI) aggregates. The index expresses the current year escapement relative to the maximum observation from the 1995-2006 period.

Johnstone Strait and Mainland Inlet

The Keogh River plays an important role as the wild coho indicator stock for the Upper Johnstone Strait Area. Smolt production in 2006 was around 51,000, below the long term average of 55,000. Preliminary indication from the resulting adult escapement in 2007 is that marine survival has improved relative to the last few years (~5% smolt to adult survival). Smolt production from the Keogh in 2007 was slightly higher than the long term average (~56,000).

The marine survival indicator for Area 13 is the Quinsam River Hatchery. Early information from Quinsam indicates significant improvements in return abundance over 2006.

Water levels throughout the season were higher than normal in a majority of watersheds in the area. There were no identified delays in up-river migration in most of the monitored coho systems. Current escapement reports are showing a significant improvement in return abundance over 2006. At this time it is still too early to provide an indication of stock status.

Johnstone Strait Chum

This year constituted the 6th year of the fixed exploitation rate harvest strategy for Study Area Chum in Johnstone Strait. In order to ensure sufficient escapement levels while providing more stabilization of the fisheries a 20% fixed exploitation rate strategy independent of run size was implemented in 2002. A preseason planning model based on expectation of effort and exploitation levels by gear group was utilized to layout the

fishing plan. Fisheries were conducted based on allocation of the 20% across the user groups which include commercial, recreational and First Nation food social and ceremonial fisheries. Past tagging studies conducted in 2000, 2001 and 2002 to assess the exploitation rate and migration timing of chum stocks in the Johnstone Strait helped in the development of this strategy.

Data are still being compiled and analyzed to determine the final harvest rate estimates.

First Nations

The preliminary estimated catch by First Nations in the Johnstone Strait area is estimated at 14,700 chums. This is higher than previous years due to the lack of sockeye salmon available for harvest this year.

Marine Recreational

The recreational catch in Johnstone Strait, PFMA 12, was estimated at 355 chums. This estimate represents catch during the months of July and August from a directed creel survey and is likely an underestimate, however recreational effort directed at chum outside the survey period during September and October is typically low.

Non-Tidal Recreational

There were no directed chum fisheries in non-tidal waters in the Johnstone Strait area.

Commercial

Johnstone Strait study area chum fisheries for commercial seine, gillnet and troll were conducted between October 1st and Nov 6th. The total commercial fishery study area chum catch from Johnstone Strait was estimated at 480,241 pieces. Fisheries conducted are as follows:

Area B Seine:

Three competitive seine fishery openings for all vessels were conducted this year. The first opening occurred on Oct 1 st for12 hrs, the second on Oct 22nd for 10 hrs and the third opening occurred on Oct 23 for 3 hrs for a total catch of 353,200 chum. The third opening was added due to a reduced fleet size in the first fishery than was modelled preseason. The demonstration seine fishery was not repeated this year. DFO and the Area B Harvest Committee could not agree on what model to use to determine the "per vessel allocation" for the demonstration fishery.

Area D Gillnet:

Four gillnet fishery openings of 41 hrs each were conducted between October 4th and October 30th for an estimated total catch of 86,900 chums. The fourth opening occurred as a result of a reduced fleet size than was modelled preseason coupled with 2 nights of poor weather that hampered fishing abilities.

Area H Troll:

Three traditional troll fishery openings (total 9 fishing days) were conducted between Oct 3rd and Oct 17th and one ITQ troll fishery were conducted between Oct 4th and Nov 6th for an estimated total catch of 40,141 chums.

In the ITQ Demonstration Fishery 29 vessels applied and 15 were drawn to participate. The initial quota was set at 364 chum/vessel based on a conversion of the ITQ fisheries share of the allowable troll exploitation rate into pieces derived from the estimated exploitation rate and catch in the first seine fishery. The quota was revised to 684 chum/vessel on Oct. 12/07 primarily due to changes in modelled run-timing and to a lesser extent as a result of lower than anticipated effort overall.

Johnstone Strait Fisheries (Areas 12 and 13)

Fishery Date	Gear type	Effort	Catch
Oct 1 (12 hrs)	B - SN	100	107,600
Oct 2 to 4 (3 days)	H - TR	44-45	10,277
Oct 4 to 6 (41 hrs)	D - GN	123	15,860
Oct 9 to 11 (3 days)	H - TR	38-42	16,311
Oct 9 to 11 (41 hrs)	D- GN	90	31,934
Oct 15 to 17 (3 days)	H - TR	35-40	8,352
Oct 15 to 17 (41 hrs)	D - GN	101	23,380
Oct 22 (10 hrs)	B - SN	97	190,900
Oct 23 (3 hrs)	B-SN	97	54,700
Oct 28 to 30 (41hrs)	D-GN	52	15,726
ITQ Oct 4 to Nov 6	H-TR	2-6	5,201

	Total Catch	% of catch	J.S. Allocation Plan
Area B	353,200	73.5%	77% (82% of net share)
Area D	86,900	18.1%	17% (18% of net share)
Area H	40,141	8.4%	6% (of total commercial)
Total Catch:	480,241	100%	

Bute Inlet Reduced Fleet Chum Fishery

The reduced fleet Bute Inlet gill net Chum fishery occurred again this year. This fishery targets summer run Orford River chum and runs from mid August until mid September. Five gill net vessels participated in this fishery for one 15 hour day per week in an area between Fawn Bluff and Purcell Point. The catches for the vessels per week are found below.

Area	Licence	# of Vessels	Total Chum Catch	FSC Coho
Bute Assessment Fishery August 22	D	5	99	8
Bute Assessment Fishery August 29	D	5	345	10
Bute Assessment Fishery September 5	D	5	354	17

The fishery was curtailed earlier than planned due to low chum returns to the Orford River. The preliminary estimate of returns to the Orford River system is 5,000 chum. Live coho by-catch was returned to the water. Dead coho were collected by one of the Homalco fishermen and used for FSC requirements.

Nimpkish River

At this time chum returns to the Nimpkish River are very poor. It is unlikely there will be any chum harvest other than removals for Nimpkish River Hatchery brood stock.

Stock Status

Mixed Stocks

The preseason expectation for Study Area Chums suggested average to above average returns to the area. The main component to the return was expected to be the Fraser River stocks, although both Fraser and Non-Fraser components of the return were originating from average brood returns in 2002.

Similar to last year, there were no test fisheries sanctioned to assess chum timing and relative abundance in Johnstone Straits. Preliminary information on escapements and catch to date suggest lower than expected abundance for Inside Study Area chum stocks. In-season information is still being collected and analyzed in regards to total stock size.

Terminal Returns

Most summer run chum returns in Statistical Area 12 were below expectations (Viner and Ahta Rivers). Some improvement over brood returns was observed on the Ahnuati River.

At this point it is still too early to assess the status of fall run chum in the Johnstone Strait Area. Preliminary information indicates returns are below average for a variety of systems within the area. Initial observations on the Nimpkish River have provided little evidence of any chum returning to that system. The assessment of that system will continue into December.

Fraser River Chum

The escapement objective for Fraser River chum is 800,000. Required protection for co-migrating stocks of concern delays chum fisheries from the peak of the run (mid-October) to

the end of the run (late October – early November). Chum returns to the Fraser have been above the escapement objective for a number of years. Small numbers of short fishery openings have prevented adverse impacts on local chum populations.

Fisheries

Fraser River chum are harvested in Johnstone Strait as well as in the Fraser River.
Chum fisheries are severely limited by conservation concerns for Interior Fraser (including Thompson River) coho and Interior Fraser steelhead. The lower Fraser River was closed from September 4 – October 8 below Mission to protect Interior Fraser coho. Commercial gill net fisheries were limited to protect Interior Fraser steelhead.

First Nations

First Nations food, social and ceremonial (FSC) fisheries commenced October 6 (below Mission) at the end (97.5%) of the Interior Fraser coho migration. The estimated catch from all fisheries (FSC and economic opportunity) below Sawmill Creek to November 25th is 85,976. The FSC catch was 11,374 and the economic opportunity catch was 74,602. ESSR harvests have not yet been reported.

Recreational

In Fraser mainstem fishery, 3,007 chums were kept by November 30th, and catch was not monitored directly thereafter. In the Chilliwack River, an estimated 1,553 chum were retained between September 15th and November 15th, and recreational catches were not directly monitored outside this period.

Commercial

Chum test fishing began on September 1st and was conducted every alternate day until October 21st when Chinook test fishing was terminated and Chum test fishing then continued on a daily basis. Chum catches in the 6.75" chum test net from September 1st to November 30th, representing 65 test fishing days, totalled 5,847.

Two Area E commercial gill-net fisheries took place within specified portions of Area 29 on October 25th and November 2nd with estimated catches of 40,000, and 14,000, respectively. The total estimated Area E catch for 2007 was 54,000.

Stock Status

Total Fraser River chum run size to the Fraser is estimated in-season using Albion test fishing CPUE and a Bayesian model (CSAS Res.Doc. 2000/159, Gazey and Palermo). A run size of 1.14 million was calculated with Albion catch data to November 30th. No other escapement estimates for the 2007 return are currently available.

While there have been substantial returns in recent years (e.g. 1998) the late timing of the run appears to be truncated compared to historical run distribution. In the past, chum returned to the Fraser River and its tributaries well into December. The run is now essentially over by mid-late November. Whether this is a result of fishing practices, habitat changes to the spawning area that were used by late returning fish (e.g. mainstem spawning areas) or some other currently unidentified factor has yet to be determined.

Escapement estimates are based on enumeration of a very few large enhanced populations (e.g. Harrison River). The status of small systems and different timing groups is uncertain.

Strait of Georgia Chum

The Strait of Georgia chum fisheries consist of terminal opportunities for chums returning to their natal spawning streams. Many of the potential terminal fishing areas have enhancement facilities and/or spawning channels associated with the rivers. Terminal fishery strategies consists of monitoring and assessing stocks (escapement and returning abundance) with the objective of ensuring adequate escapement and providing harvest opportunities where possible. Stocks assessments may include test fisheries, commercial assessment fisheries, escapement enumeration, and over flights. In some areas where stocks receive considerable enhancement (Qualicum) or where stocks have above average productivity, limited fishing may occur prior to major escapement occurring.

The Qualicum fishery, which includes production from three major enhancement facilities (Big Qualicum, Little Qualicum and Puntledge hatcheries), has a specific harvest strategy, implemented since 1981. This strategy consists of limited early harvest prior to escapement occurring. The early harvest total allowable catch (TAC) ceiling is 65% of the total forecast surplus. This allows for a buffer to safeguard against errors in forecast stock abundance. This buffer is limited to 100,000 fish, with any additional surplus considered early harvest TAC. The harvest of early (brighter) fish is conducted with consideration of stocks of concern and minimizing by-catch of other species and non-target passing chum stocks.

Since 2002, Puntledge River stock returns have been above average resulting in terminal fisheries focusing on this slightly earlier timed stock. This fishery continued in 2007.

Other factors affecting the scheduling of commercial fisheries include coast-wide allocation, fishery impacts, gear interaction, effort and weather.

Recreational marine catches for chum salmon are generally small. Occasionally recreational in-river fisheries occur where surpluses or target escapements will be met. These fisheries are almost exclusively where enhancement facilities are present.

The Strait of Georgia terminal fisheries are managed on a stock by stock basis. Each stock return is assessed individually according to the characteristics of the potential fishery. Assessment and harvesting may begin as early as October and continue to as late as December. Information is preliminary as escapements continue to be compiled.

Fisheries

First Nations

Chums are harvested by First Nations for both ESSR and FSC opportunities. Catch reports are still being compiled as some fishing is still occurring.

Areas 14 to 16 – Puntledge to Qualicum. As of November 22nd, 5,637 chums had been harvested as ESSR from the Puntledge hatchery. There was no chum harvested as ESSR

in Areas 15 or 16 in 2007. FSC harvest has been minimal and catch data are currently being compiled.

Areas 17 to 19 – Nanaimo to Goldstream Rivers. Harvest has been minimal and catch data are currently being compiled.

Recreational

The recreational creel survey extends from the marine area of Discovery Passage, (outside of Campbell River) to Sannich Inlet (PFMA 13-19A, 28 and 29). The majority of recreational effort directed at chum salmon occurs in the Discovery Passage area. The total catch estimate for the recreational fleet in Area 13 for 2007 was 5,300 chums, of which 93% was harvested in the month of October. The 2007 chum CPUE is approximately 65% of what was caught in 2005 and 2006.

Commercial

Area 14 – Qualicum Area.

Gill net openings occurred on October 9-11th, 15 – 17th, 22 – 25th 29 – 31st, and November 5 – 7th in the Puntledge area. There were no openings for the Big and Little Qualicum areas due to low escapements. There was a total of 10 days fished with a catch of approximately 25,300 chums. The troll fishery opened from October 6th to November 7 th in the Puntledge area. There were no openings in the Big and Little Qualicum areas. The troll fishery was open for 31days with a catch of approximately 270 chums. One seine fishery occurred on November 5 – 6th in the Puntledge area, with a catch of approximately 60 chum.

Area 16 – Jervis Inlet.

No commercial fisheries occurred in Jervis Inlet as no surplus was identified. Escapement assessments continue at the time of writing.

Area 17

One gillnet opening occurred for 48 hours from November 2 – 4th, with a catch of approximately 330 chum. A troll fishery opening from November 2 - 8th reported no effort.

Area 18

In 2007, the marine approach area was assessed by seine vessel on a schedule of 2 days per week for 3 weeks commencing on October 31. One 3 vessel limited-entry gillnet opening occurred from November 5 – 7th, with a catch of approximately 400 chum. After a review of the catch information from the gillnet fishery and the seine assessment, the Chum Working Group recommended one further gillnet opening. This full fleet fishery occurred from November 21 – 23rd for a catch of approximately 6,500, bringing the total commercial catch in Area 18 to approximately 6,900 chum. There were no Areas B or H openings.

Area 19

The marine approach area was assessed by seine vessel for 2 days per week, for 3 weeks, commencing October 31. Abundance estimates in the approach area were low, and preliminary escapement estimates indicated migration timing was later then the historical peak timing of October 31. The preliminary escapement estimate to December 4 was approximately 14,000 with a target of 15,000. Target escapement was likely attained; however there was no surplus available for commercial fisheries.

Stock Status

The returning chum stock abundance to the Strait of Georgia for 2007 was forecast to be average. The 2003 brood year escapement was generally average or slightly below average, and the survival was anticipated to be above average thus providing an average to above average general forecast. Historically however, chum returns have been highly variable relative to brood year escapements. Conditions for chum migration were good with water flows ample for most of the season, and high flows in early December. To date, returns have been lower than expected and preliminary escapements are below target. Summer run chum in Bute Inlet (PFMA 13), Orford River, demonstrated an extremely poor return relative to the parental brood years 2002 and 2003.

First Nations fisheries were anticipated but occurred only in some terminal areas. Recreational fisheries for chum had low impact. To date, commercial fisheries have occurred in the Qualicum, Nanaimo and Cowichan areas.

West Coast Vancouver Island Chum

Chum salmon fisheries occur from late September to early November in WCVI fishing areas. The two primary fishing locations are adjacent to Nitinat Lake (PFMA 21) and outer Nootka Sound (PFMA 25), where commercial fisheries target wild chum returning to local streams and enhanced chum from Nitinat and Conuma hatcheries. Commercial fisheries may also target surplus Conuma hatchery production in Tlupana Inlet (PFMA 25).

With the exception of near-terminal areas, such as Nitinat or Tlupana Inlet, where hatchery stocks dominate, WCVI chum fisheries are managed to a 20% exploitation rate. The exploitation rate is controlled by fishing migration areas and limiting effort to one or two days per week, depending on the number of vessels participating in the fishery. Both commercial gillnet (D&E) and seine (B) fleets target WCVI chum. Seine opportunities generally occur when surplus to escapement/brood requirements are identified (Nitinat and Tlupana).

Since 2004, there have been limited fleet gillnet fisheries in Esperanza Inlet (Area 25) and Barkley Sound (Area 23). The Esperanza limited fleet fishery opens simultaneously with the Nootka Sound fishery. The Barkley fishery occurs two days a week during the fishing season. For the first time since 1985, a limited fleet assessment fishery (4 boats, two days per week) occurred in Clayquot Sound (Area 24) in 2007. The Clayquot fishery opened two days a week, beginning two weeks later than other WCVI chum fisheries to reduce the likelihood of Clayquot Chinook by-catch.

First Nations fisheries under section 35 remain a priority and occur in terminal areas. ESSR fisheries have also occurred at Nitinat Lake targeting hatchery surplus production.

The primary fishery which harvests chum is the commercial sector. Of the commercial sector, the main harvesters are gillnet and seine in Nitinat and gillnet in Nootka. First Nation fisheries (section 35) remain a priority and generally occur in terminal areas (i.e. Nitinat Lake). Effort and catch are usually relatively low. In-river recreational fisheries are not wide spread, but have occurred in recent years in terminal area rivers (i.e. Nitinat River). Other recreational marine fisheries are generally low in effort for chum.

Fisheries

First Nations

The Dididaht First Nation conducts FSC and ESSR fisheries in Nitinat Lake. Combined FSC and ESSR fishery catch in 2007 was 4,000 chums.

Tseshaht and Hupacasath Bands both signed a Fisheries Agreement for Chinook, Coho and Chum. Directed fisheries for chum by both Bands harvested 6,313 chums.

Recreational

The WCVI recreational fishery is open all year with a limit of four (4) per day. WCVI recreational anglers kept approximately 300 chums in the 2007 WCVI sport fishery.

Commercial

Nitinat

The Nitinat commercial chum fishery is the largest on the west coast and targets returning Nitinat River hatchery stocks. The fishing period is generally October 1st -November 15th. The fishery is managed to achieve a minimum escapement target of 250,000 and maximum escapement target of 350,000 chum salmon. The commercial TAC is based on the pre-season forecast.

This fishery provides opportunities for both seine and gillnet fleets. Gill net and seine fishing opportunities are dependent on reaching established in-lake escapement milestones by specific dates. Fleet size has varied over the past 15 years influenced by pre-season forecasts and fish value. The size of the gill net fleet in the 1990's ranged as high as 240 vessels. Over the past 5 years the gill fleet size has fluctuated between 30 and 90 vessels. The seine fleet size typically will vary from 20 to 100 vessels.

Gill Nets -2007

Weekly gill net fisheries commenced in Area 21 Nitinat on October 1st. There were 6 days of gill net fishing with the last day of fishing occurring on the 11th of October. Fleet size during the two weeks of fishing averaged 90 vessels per day. The in-season catch estimate for Area E gill nets in Area 21 is 180,111 chum salmon.

Seine - 2007

In 2007 there were no seines fisheries for Nitinat chum. While early season gill net catches were good the escapement goal for Nitinat Lake was not achieved.

Barkley Sound and Esperanza Inlet Assessment Fisheries

Commercial chum fisheries in Areas 23, 24 and 25 are managed to a specific number of vessel fishing days per week. This harvest rate approach is designed to maintain a harvest rate of 20% or less on all stocks. In 2004 and 2005 limited fleet chum assessment fisheries occurred in both Barkley Sound and Esperanza Inlet. In 2006 the Esperanza Inlet fishery was an open limited fleet fishery. In 2007 a four vessel chum assessment fishery was conducted in portions of Clayoquot Sound while the Barkley Sound fishery continued as an assessment fishery.

Area 23

The commercial chum assessment fishery in Area 23 Barkley Sound targets returning wild stocks. This gill net fishery is limited to 8 vessels to a maximum of 16 vessel days per week. This fishery is assessing the feasibility of harvesting low levels of chums from areas that have not been fished for many years. Vessels fish in pre-determined zones on the first day and on the second day all vessels were free to choose among the zones. Coho were allowed to be retained. One onboard observer was required in this fishery. The observer was on a different vessel each day of the fishery.

The 2007 in-season chum catch estimate for Area D gill nets in Area 23 is 7,828 chum salmon.

Area 24

The 2007 Clayoquot Sound chum assessment fishery was designed to avoid Chinook interceptions. The fishery starting date was October 8th, two weeks later that the Barkley Sound and Esperanza Inlet fisheries. The fleet size was restricted to four vessels in the first year. The 2007 in-season chum catch estimate for Area D gill nets in Area 24 is 4,473 chum salmon

Area 25

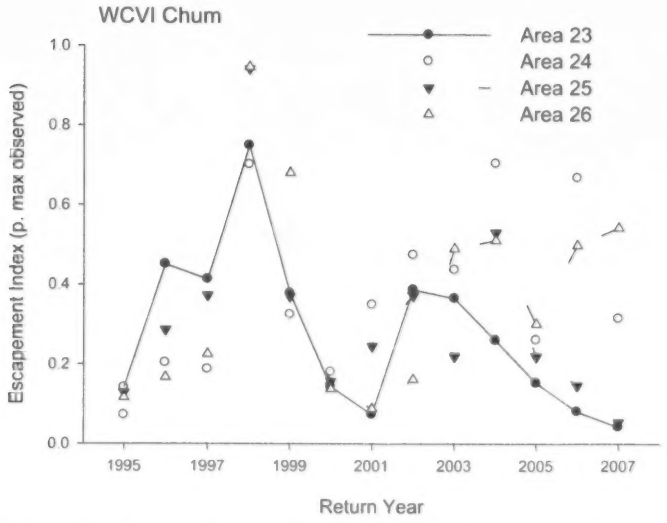
There are 3 fishing areas in Area 25, Outer Nootka Sound, Tlupana Inlet and Esperanza Inlet targeting both wild and hatchery stocks. The Outer Nootka gill net fishery is limited to 50 vessel days per week. The Esperanza Inlet gill net fishery is restricted to a maximum of 8 vessels and is open in conjunction with the outer Nootka gill net fishery. Fishing opportunities in Tlupana Inlet are dependent on identifying surplus returns to the Conuma River Hatchery.

This year, weekly gill net fisheries commenced in Area 25 on September 25th. There were 4 days of gill net fishing over the following 3 weeks in Outer Nootka Sound and Esperanza Inlet. There were no directed chum fisheries in Tlupana in 2007. The last day of gill net fishing occurred on the 11th of October. Fishing was discontinued in Outer Nootka and Esperanza Inlet when low chum returns to Conuma River and other adjacent river systems indicated very low abundance.

The in season catch estimate for Area D gill nets in Area 25 is 16,648 chum salmon.

Stock Status

All salmon escapement estimates from extensively surveyed WCVI streams are preliminary. Peak live plus dead observations indicate escapement of chum to most natural systems decreased in 2007 relative to 2006 in the WCVI area with the exception of those populations in Area 26. As well, in both Areas 24 and 26 chums escapement for 2007 is relatively abundant compared to the 12-year average. In contrast, the preliminary data suggest escapement in Areas 23 and 25 in 2007 is at or near the 12-year low. Similarly, the Nitinat hatchery (Area 21/22) total return is currently estimated at about 116,000, which is well below average. Pending further analysis of catch composition and escapement data, the status of chum returns in 2007 to WCVI populations is low to moderate, depending on location.



Index abundance of WCVI chum stocks, by statistical area. The index expresses the current year escapement relative to the maximum observation from the 1995-2006 period.

Summary Table: Catches in Canadian Treaty Limit Fisheries, 1995 to 2007 (preliminary).

Fisheries/Stocks	Species	2007	2006	2005	2004	2003	2002	2001	2000	1999	1998	1997	1996	1995
Stikine River (all gears)	Sockeye Coho Chinook-lg Chinook-jk	59,237 47 10,576 1,735	101,209 72 15,776 2,078	85,890 276 18,997 2,177	84,866 275 3,857 2,574	58,784 190 1,396 1,052	17,294 82 1,362 578	25,600 233 1,480 103	27,468 301 3,086 628	38,055 181 2,916 1,264	43,803 726 2,164 423	65,559 401 4,483 286	74,281 1,404 2,471 421	53,467 3,418 1,646 860
Taku River (commercial gillnet)	Sockeye Coho Chinook-lg Chinook-jk	14,972 5,276 1,146 442	21,093 9,180 7,312 198	21,932 6,860 7,534 821	19,860 5,954 2,074 334	32,730 3,168 1,894 547	31,053 3,082 1,561 291	47,660 2,568 1,458 118	28,009 4,395 1,576 87	20,681 4,416 908 257	19,038 5,090 1,107 227	24,003 2,594 2,731 84	41,665 5,028 3,331 144	32,640 13,629 1,577 298
Areas 3 (1-4)* (commercial net)	Pink	1,740,270	228,378	878,552	402,459	667,103	876,631	473,318	127,000	2,162,280	61,000	329,000	987,000	2,613,000
Area 1 (commercial troll)	Pink	61,276	34,854	39,430	27,751	98,347	41,418	175,000	28,295	25,000	0	261,000	732,000	1,284,000
North Coast** (troll + sport)	Chinook	137,235 83,235 + 54,000	215,985 151,485 + 64,500	243,606 174,806 + + 68,800	241,508 167,508 + 74,000	191,657 137,357 + 54,300	141,848 94,748 + 47,100	43,500	32,048	70,701	144,650	145,568	26,900	119,100
West Coast Vancouver Island (troll + sport + FN)	Chinook	139,130 87,921 + 46,209 + 5,000	146,883 103,978 + 37,905 + 5,000	199,407 143,614 + + 55,793	211,333 168,837 + 42,496	175,821 151,826 + 23,995	22,009 128,798	36,474 54,770	37,200 63,400	31,100 6,500	10,284	51,400	0	81,000
Fraser River Canadian Commercial Catch	Sockeye Pink	0 333,300	4,633,623 68,325	137,000 338,000	1,993,800 0	1,042,986 1,149,189	2,182,700 0	295,000 579,000	953,000 0	54,000 3,000	1,295,000 0	8,737,000 3,660,000	1,019,000 0	903,000 3,777,000
Fraser River U.S. Commercial Catch	Sockeye Pink	3,900 377,600	701,300 0	0 0	192,200 0	244,000 773,000	434,600 0	240,000 427,000	494,000	41,000 3,000	707,000 0	1,578,000 1,565,000	257,000 0	415,000 1,919,000
West Coast Vancouver Island (commercial troll)	Coho	1,424	2,399	5,989	0	0	0	0	0	0	0	0	761,000	1,345,000
Johnstone Strait (clockwork catch)***	Chum	494,944	800,363	787,226	1,089,100	1,026,029	700,000	236,000	161,000	41,411	1,820,000	104,593	101,971	269,000

*AREA 5-11 CATCHES INCLUDED PRIOR TO 1995 AND EXCLUDED FROM 1995-1998 INCLUSIVE. NOT PART OF 1999 ANNEX IV PROVISIONS.
** NORTH COAST CATCH EXCLUDES TERMINAL EXCLUSION CATCHES OF 6,000 ('91), 6,100 ('92), 7,400 ('93), 6,400 ('94), 1,702 ('95), 16,000 ('96), 5,943 ('97), and 2,182 in 1998. NO TERMINAL EXCLUSION IN THE 1999 AGREEMENT - COVERED UNDER THE AABM ARRANGEMENT; CENTRAL COAST AREAS NOT PART OF 1999 ANNEX IV PROVISIONS.
*** CANADIAN CATCH INCLUDES COMMERCIAL , IFF AND TEST FISH CATCHES IN AREAS 11-13 FOR 1991-94 INCLUSIVE, AND IN AREAS 12-13 FOR 1995 TO 2004 INCLUSIVE
NOTE: BOLD LINE BETWEEN 1998 AND 1999 INDICATES THAT 1999 CATCHES ARE REPORTED ACCORDING TO FISHERIES/STOCKS UNDER THE 1999 ANNEX IV PROVISIONS.

Table 1. 2005/2006 Preliminary AABM Chinook Catch by Fishery.

PST Regime	Fishery	Month	Numbers	
			Kept	Released
WCVI-AABM	Area G Troll	Oct-06	16,026	1,807
		Nov-06	1,190	203
		Dec-06	770	162
		Jan-07	5,440	771
		Feb-07	2,587	449
		Mar-07	2,256	382
		Apr-07	5,223	282
		May-07	23,464	1567
		Jun-07	24,983	1,242
		Jul-07	0	0
		Aug-07	0	0
		Sep-07	5,982	1,945
Troll Total			**87,921**	**8,810**
	Outside Sport	Jun-07	8,300	4,415
	Outside Sport	Jul-07	13,885	9,149
	Outside Sport	Aug-07	22,063	7,715
	Outside Sport	Sep-07	1,961	338
Sport Total			**46,209**	**21,617**
First Nations	Johnstone Strait			
First Nations	Strait of Georgia			
First Nations	WCVI Offshore		5,000	
First Nations	WCVI Inshore			
First Nations	Fraser River			
First Nations Total			**5,000**	**0**
All Total			**139,130**	**30,427**

Table 2. 2007 Preliminary ISBM Chinook Catch by Fishery and Area.

PST Regime	Gear	Fishery (Area)	Numbers	
			Kept	Released
ISBM	Area G Troll	WCVI Chinook (23 - 27, 123 - 127)	0	0
	Area H Troll	Fraser Pink (12,13,16,18)	0	24
	Area H Troll	JST Chum (12,13)	0	262
	Area H Troll	MVI Chum (17)	0	0
	Area H Troll	MVI Chum (14)	0	7
	Area H Troll	Fraser Chum (29)	incomplete FOS estimate	
	Area B Seine	Somass Chinook (23)	4,041	57
	Area B Seine	JST Chum (12,13)	0	41
	Area B Seine	MVI Chum (14)	0	0
	Area D Gillnet	Tlupana Chinook (25)	6,101	0
	Area D Gillnet	Somass Chinook (23)	16,739	1
	Area D Gillnet	Bute Chum (13)	0	2
	Area D Gillnet	Neroutsos Chum (27)	0	0
	Area D Gillnet	Nootka Chum (25)	0	11
	Area D Gillnet	Esperenza Chum (25)	0	1
	Area D Gillnet	Clayoquot Chum (24)	0	0
	Area D Gillnet	Barkley Chum (23)	0	13
	Area D Gillnet	JST Chum (12,13)	0	27
	Area D Gillnet	MVI Chum (14)	0	0
	Area E Gillnet	MVI Chum (17)	0	0
	Area E Gillnet	MVI Chum (18)	0	0
	Area E Gillnet	Nitinat Chum (21)	0	5
	Area E Gillnet	Fraser Chum (29)	68	39
		Albion Chinook Test Fishery	2,628	7
Total Commercial Catch			**29,577**	**497**
Recreational	Sport	Juan de Fuca	26,549	11,832
	Sport	Strait of Georgia	14,561	25,595
	Sport	Johnstone Strait	8,922	5,814
	Sport	WCVI - Inside	38,631	13,329
	Sport	Fraser River	10,723	3,430
Total Recreational Catch			**99,386**	**60,000**
First Nations		Johnstone Strait	200	
		Strait of Georgia		
		WCVI	20,098	
		Fraser River	20,996	716
Total First Nations Catch			**41,294**	**716**
TOTAL - ALL FISHERIES			**170,257**	**61,213**

Fraser River notes: First Nations Chinook catches include EO fisheries. Area E gillnet test fishery includes Albion, Cottonwood, and Whonnock. Fraser River sport includes data from all Fraser creel surveyed systems (e.g., all upper Fraser, lower Fraser mainstem, Chilliwack River, and Nicomen). There was no Area E (Area 29) sockeye openings in 2007.

Table 3. 2007 Preliminary Coho Catch by Fishery and Area.

Commercial	Area G Troll	WCVI Chinook (23 - 27, 123 - 127)	1,424	10,776
	Area H Troll	Fraser Pink (12,13,16,18)	0	261
	Area H Troll	JST Chum (12,13)	0	405
	Area H Troll	MVI Chum (17)	0	0
	Area H Troll	MVI Chum (14)	0	0
	Area H Troll	Fraser Chum (29)	incomplete FOS estimate	
	Area B Seine	Somass Chinook (23)	3,755	1
	Area B Seine	JST Chum (12,13)	0	1,197
	Area B Seine	MVI Chum (14)	0	0
	Area D Gillnet	Tlupana Chinook (25)	4	0
	Area D Gillnet	Somass Chinook (23)	113	2
	Area D Gillnet	Bute Chum (13)	0	192
	Area D Gillnet	Neroutsos Chum (27)	0	17
	Area D Gillnet	Nootka Chum (25)	501	1
	Area D Gillnet	Esperenza Chum (25)	118	2
	Area D Gillnet	Clayoquot Chum (24)	0	15
	Area D Gillnet	Barkley Chum (23)	323	0
	Area D Gillnet	JST Chum (12,13)	0	729
	Area D Gillnet	MVI Chum (14)	3	30
	Area E Gillnet	MVI Chum (17)	0	0
	Area E Gillnet	MVI Chum (18)	0	4
	Area E Gillnet	Nitinat Chum (21)	2	235
	Area E Gillnet	Fraser Chum (29)	0	1,042
		Albion Chinook Test Fishery	0	519
Total Commercial Catch			**6,243**	**15,428**
Recreational	Sport	Juan de Fuca	6,714	12,185
	Sport	Strait of Georgia	1,955	10,561
	Sport	Johnstone Strait	6,466	6,223
	Sport	WCVI - Inside Retention	18,098	8,591
	Sport	WCVI - MSF	25,334	37,652
	Sport	Fraser River	8,069	10,382
Total Recreational Catch			**66,636**	**85,594**
First Nations		Johnstone Strait *	500	
		Strait of Georgia		
		WCVI		
		Fraser River	1,361	6,941
Total First Nations Catch			**1,861**	**6,941**
TOTAL - ALL FISHERIES			**74,740**	**107,963**

* Includes 300 pieces from Round Island Test Fisheries

Table 4. 2007 Preliminary Chum Catch by Fishery and Area.

Chum

PST Regime	Gear	Fishery (Area)	Numbers	
			Kept	Released
Commercial	Area G Troll	WCVI Chinook (23 - 27, 123 - 127)	854	37
	Area H Troll	Fraser Pink (12,13,16,18)	12	1
	Area H Troll	JST Chum (12,13)	40,144	227
	Area H Troll	MVI Chum (17)	0	0
	Area H Troll	MVI Chum (14)	268	0
	Area H Troll	Fraser Chum (29)	incomplete FOS estimate	
	Area B Seine	Somass Chinook (23)	0	52
	Area B Seine	JST Chum (12,13)	353,200	0
	Area B Seine	MVI Chum (14)	62	0
	Area D Gillnet	Tlupana Chinook (25)	1	0
	Area D Gillnet	Somass Chinook (23)	0	1
	Area D Gillnet	Bute Chum (13)	798	0
	Area D Gillnet	Neroutsos Chum (27)	956	0
	Area D Gillnet	Nootka Chum (25)	7,449	0
	Area D Gillnet	Esperenza Chum (25)	9,199	0
	Area D Gillnet	Clayoquot Chum (24)	4,473	0
	Area D Gillnet	Barkley Chum (23)	7,828	0
	Area D Gillnet	JST Chum (12,13)	86,900	14
	Area D Gillnet	MVI Chum (14)	25,353	6
	Area E Gillnet	MVI Chum (17)	326	0
	Area E Gillnet	MVI Chum (18)	6,936	2
	Area E Gillnet	Nitinat Chum (21)	180,111	37
	Area E Gillnet	Fraser Chum (29)	53,970	71
		Albion Chinook Test Fishery	7,688	0
Total Commercial Catch			**785,674**	**411**
Recreational	Sport	Juan de Fuca	169	3
	Sport	Strait of Georgia	5,301	330
	Sport	Johnstone Strait	355	32
	Sport	WCVI	318	54
	Sport	Fraser River	4,564	17,374
Total Recreational Catch			**10,707**	**17,793**
First Nations		Johnstone Strait	14,700	
		Strait of Georgia	5,637	
		WCVI	10,313	
		Fraser River	86,887	1,040
Total First Nations Catch			**117,537**	**1,040**
TOTAL - ALL FISHERIES			**913,918**	**19,244**

Table 5. 2007 Preliminary Pink Catch by Fishery and Area.

PST Regime	Gear	Fishery (Area)	Numbers	
			Kept	Released
Commercial	Area G Troll	WCVI Chinook (23 - 27, 123 - 127)	732	712
	Area H Troll	Fraser Pink (12,13,16,18)	1,838	0
	Area H Troll	JST Chum (12,13)	23	14
	Area H Troll	MVI Chum (17)	0	0
	Area H Troll	MVI Chum (14)	0	0
	Area H Troll	Fraser Chum (29)	0	0
	Area B Seine	Somass Chinook (23)	0	12
	Area B Seine	JST Chum (12,13)	40,676	30
	Area B Seine	MVI Chum (14)	0	0
	Area D Gillnet	Tlupana Chinook (25)	0	0
	Area D Gillnet	Somass Chinook (23)	0	0
	Area D Gillnet	Bute Chum (13)	0	0
	Area D Gillnet	Neroutsos Chum (27)	0	0
	Area D Gillnet	Nootka Chum (25)	0	0
	Area D Gillnet	Esperenza Chum (25)	0	0
	Area D Gillnet	Clayoquot Chum (24)	0	0
	Area D Gillnet	Barkley Chum (23)	0	0
	Area D Gillnet	JST Chum (12,13)	22	1
	Area D Gillnet	MVI Chum (14)	0	0
	Area E Gillnet	MVI Chum (17)	0	0
	Area E Gillnet	MVI Chum (18)	0	0
	Area E Gillnet	Nitinat Chum (21)	0	884
	Area E Gillnet	Fraser Chum (29)	0	9
		Albion Chinook Test Fishery	1,474	0
Total Commercial Catch			**44,765**	**1,662**
Recreational	Sport	Juan de Fuca	63,024	26,561
	Sport	Strait of Georgia	15,909	3,225
	Sport	Johnstone Strait	22,077	12,435
	Sport	WCVI	3,113	2,422
	Sport	Fraser River	23,395	83,954
Total Recreational Catch			**127,518**	**128,597**
First Nations		Johnstone Strait	5,900	20,000
		Strait of Georgia		
		WCVI		
		Fraser River	339,235	81,899
Total First Nations Catch			**345,135**	**101,899**
TOTAL - ALL FISHERIES			**517,418**	**232,158**

Table 6. 2007 Preliminary Sockeye Catch by Fishery and Area.

SOCKEYE

Fishery	Gear	Fishery (Area)	Numbers	
			Kept	Released
Commercial	Area G Troll	WCVI Chinook (23 - 27, 123 - 127)	0	14
	Area H Troll	Fraser Pink (12,13,16,18)	0	132
	Area H Troll	JST Chum (12,13)	0	10
	Area H Troll	MVI Chum (17)	0	0
	Area H Troll	MVI Chum (14)	0	0
	Area H Troll	Fraser Chum (29)	0	0
	Area B Seine	Somass Chinook (23)	0	15
	Area B Seine	JST Chum (12,13)	0	19
	Area B Seine	MVI Chum (14)	0	0
	Area D Gillnet	Tlupana Chinook (25)	0	0
	Area D Gillnet	Somass Chinook (23)	0	0
	Area D Gillnet	Bute Chum (13)	0	0
	Area D Gillnet	Neroutsos Chum (27)	0	0
	Area D Gillnet	Nootka Chum (25)	0	1
	Area D Gillnet	Esperenza Chum (25)	0	0
	Area D Gillnet	Clayoquot Chum (24)	0	0
	Area D Gillnet	Barkley Chum (23)	0	0
	Area D Gillnet	JST Chum (12,13)	0	9
	Area D Gillnet	MVI Chum (14)	0	0
	Area E Gillnet	MVI Chum (17)	0	0
	Area E Gillnet	MVI Chum (18)	0	0
	Area E Gillnet	Nitinat Chum (21)	0	0
	Area E Gillnet	Fraser Chum (29)	0	3
		Albion Chinook Test Fishery	2,541	0
Total Commercial Catch			**2,541**	**203**
Recreational	Sport	Juan de Fuca	198	1,158
	Sport	Strait of Georgia	3	994
	Sport	Johnstone Strait	74	377
	Sport	WCVI - Inside	61	326
	Sport	Fraser River	11	24,268
Total Recreational Catch			**347**	**27,123**
First Nations		Johnstone Strait	42,900	
		Strait of Georgia		
		WCVI	9,860	
		Fraser River	154,202	430
Total First Nations Catch			**206,962**	**430**
TOTAL - ALL FISHERIES			**209,850**	**27,756**

Table 7. 2007 Commercial Totals by Gear and Area.

Gear	Fishing Area	Sockeye Kept	Sockeye Released	Coho Kept	Coho Released	Pink Kept	Pink Released	Chum Kept	Chum Released	Chinook Kept	Chinook Released
Area G Troll	WCVI Chinook (23 - 27, 123 - 127)	0	14	1,631	11,380	732	712	982	35	87,921	8,810
Area H Troll	Fraser Pink (12,13,16,18)	0	132	0	261	1,838	0	12	1	0	24
Area H Troll	JST Chum (12,13)	0	10	0	405	23	14	40,144	227	0	262
Area H Troll	MVI Chum (17)	0	0	0	0	0	0	0	0	0	0
Area H Troll	MVI Chum (14)	0	0	0	0	0	0	268	0	0	7
Area H Troll	Fraser Chum (29)	Incomplete FOS Estimate									
Area B Seine	Somass Chinook (23)	0	15	3,755	1	0	12	0	52	4,041	57
Area B Seine	JST Chum (12,13)	0	19	0	1,197	40,676	30	353,200	0	0	41
Area B Seine	MVI Chum (14)	0	0	0	0	0	0	62	0	0	0
Area D Gillnet	Tlupana Chinook (25)	0	0	4	0	0	0	1	0	6,101	0
Area D Gillnet	Somass Chinook (23)	0	0	113	2	0	0	0	1	16,739	1
Area D Gillnet	Bute Chum (13)	0	0	0	192	0	0	795	0	0	2
Area D Gillnet	Neroutsos Chum (27)	0	0	0	17	0	0	956	0	0	0
Area D Gillnet	Nootka Chum (25)	0	1	501	1	0	0	7,449	0	0	11
Area D Gillnet	Esperenza Chum (25)	0	0	118	2	0	0	9,199	0	0	1
Area D Gillnet	Clayoquot Chum (24)	0	0	0	15	0	0	4,473	0	0	0
Area D Gillnet	Barkley Chum (23)	0	0	323	0	0	0	7,828	0	0	13
Area D Gillnet	JST Chum (12,13)	0	9	0	729	22	1	86,900	14	0	27
Area D Gillnet	MVI Chum (14)	0	0	3	30	0	0	25,353	6	0	0
Area E Gillnet	MVI Chum (17)	0	0	0	0	0	0	326	0	0	0
Area E Gillnet	MVI Chum (18)	0	0	0	4	0	0	6,936	2	0	0
Area E Gillnet	Nitinat Chum (21)	0	0	2	235	0	884	180,111	37	0	5
Area E Gillnet	Fraser Chum (29)	0	3	0	1,042	0	9	53,970	71	68	39
	Albion Chinook Test Fishery	2,541	0	0	519	1,474	0	7,688	0	2,628	7
TOTALS		2,541	203	6,450	16,032	44,765	1,662	786,653	446	117,498	9,307

Table.8. 2007 Recreational Totals by Area.

Gear	Fishing Area	Sockeye Kept	Sockeye Released	Coho Kept	Coho Released	Pink Kept	Pink Released	Chum Kept	Chum Released	Chinook Kept	Chinook Released
Sport	Juan de Fuca	198	1,158	6,714	12,185	63,024	26,561	169	3	26,549	11,832
Sport	Strait of Georgia	3	994	1,955	10,561	15,909	3,225	5,301	330	14,561	25,595
Sport	Johnstone Strait	74	377	6,466	6,223	22,077	12,435	355	32	8,922	5,814
Sport	WCVI CN - ISBM									38,631	13,329
Sport	WCVI CN - AABM									46,209	21,617
Sport	WCVI CO - Inside			18,098	8,591						
Sport	WCVI CO - MSF			25,334	37,652						
Sport	WCVI	61	326			3,113	2,422	318	54		
Sport	Fraser River	11	24,268	8,069	10,382	23,395	83,954	4,564	17,374	10,723	3,430
TOTALS		**347**	**27,123**	**66,636**	**85,594**	**127,518**	**128,597**	**10,707**	**17,793**	**145,595**	**81,617**

Table 9. 2007 First Nations Catch Estimates

Fishing Area	Chinook Kept	Coho Kept	Chum Kept	Pink Kept	Fraser Sockeye Kept	Barkley Sockeye Kept
Johnstone Strait	200	500	14,700	5,900	42,900	
Strait of Georgia			5,637			
WCVI	25,098		10,313			9,860
Fraser River	20,996	1,361	86,887	339,235	154,202	
TOTALS	**46,294**	**1,861**	**117,537**	**345,135**	**197,102**	**9,860**

C. 2007 POST-SEASON REPORT FOR UNITED STATES SALMON FISHERIES OF RELEVANCE TO THE PACIFIC SALMON COMMISSION

Northern Boundary Area Fisheries

District 104 Purse Seine Fishery

The June 30, 1999 revision of the Pacific Salmon Treaty (PST) Agreement calls for abundance based management of the District 104 purse seine fishery. The agreement allows the District 104 purse seine fishery to harvest 2.45 percent of the Annual Allowable Harvest (AAH) of Nass and Skeena sockeye prior to statistical week 31. The AAH is calculated as the total run of Nass and Skeena sockeye salmon minus either the escapement requirement of 1.1 million (200,000 Nass and 900,000 Skeena) or the actual inriver escapement, whichever is less.

The District 104 purse seine fishery opens the first Sunday in July; in 2007 the initial opening was July 1 (Week 27). The pre-Week 31 fishing plan for District 104 was based on the preseason Canadian DFO forecast returns of approximately 828,000 Nass and 2.5 million Skeena sockeye salmon.

In the 2007 treaty period, 112,135 sockeye were harvested in: a 12-hour opening in Week 27; a 12-hour opening in Week 28; an 8-hour opening in Week 29; and a 12-hour and a 6-hour opening in Week 30 (Table 1). The number of purse seine vessels fishing ranged from 23 to 49 in individual openings during the treaty period. In past years 60% to 80% of treaty-period sockeye have been of Nass and Skeena origin. Thus, we would anticipate that between 67,300 and 89,700 Nass and Skeena sockeye were harvested in the District 104 purse seine fishery during the treaty period. The final number of Nass and Skeena sockeye harvested, and the actual catch by stock, will not be available until catch, escapement, and stock composition estimates are finalized for the year.

The average numbers of hours, boats and boat-days fished pre-Week 31 in District 104 since the Pacific Salmon Treaty was signed in 1985 are down 54%, 54% and 81% respectively compared to the 1980-1984 period (Table 2). The total pre-Week 31 Treaty-period sockeye harvest is also down 34% despite a 299% increase in the average sockeye catch-per-boat-day since 1984. The seine fleet moves freely between districts as various species are harvested, so seining opportunities elsewhere can affect the effort and catch in District 104.

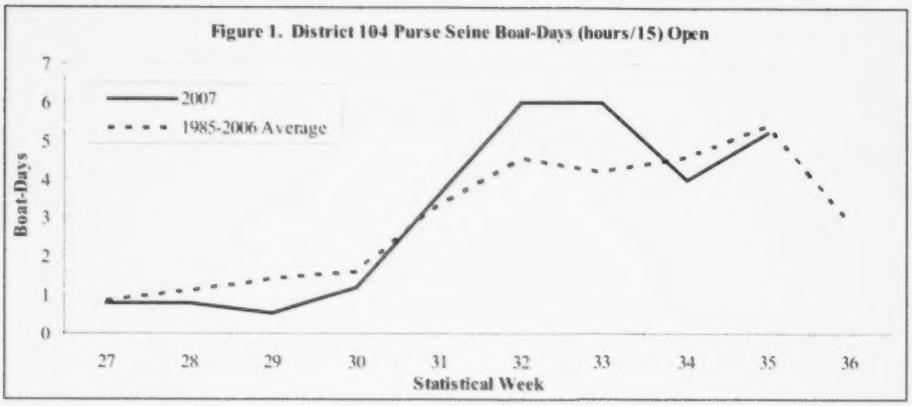
Table 10. Catch and Effort in the Alaska District 104 purse seine fishery, 2007.

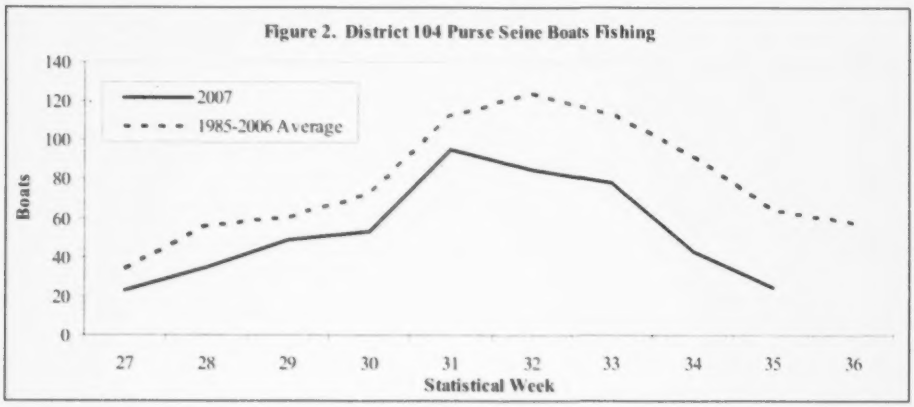
Week/ Opening	Start Date	Chinook	Sockeye	Coho	Pink	Chum	Boats	Hours
27	7/1	364	7,406	3,066	40,542	19,415	23	12
28	7/8	361	17,547	2,906	78,627	38,210	35	12
29	7/15	262	21,619	3,414	125,917	22,897	49	8
30	7/22	386	42,332	3,789	547,055	27,251	48	12
30B	7/26	253	23,231	1,332	202,027	10,817	27	6
31	7/29	766	60,588	8,404	1,507,787	29,409	82	15
31B	8/1	3,023	146,272	11,643	2,757,603	49,629	82	39
32	8/5	1,163	54,641	3,668	703,388	17,469	55	15
32B	8/6	841	28,761	2,586	540,314	10,620	39	15
32C	8/7	941	23,957	3,075	479,393	8,929	33	15
32D	8/8	922	26,790	3,739	576,163	9,946	46	15
32E	8/10	0	35,016	2,456	411,234	9,208	37	15
32F	8/11	0	35,889	3,677	471,687	13,304	46	15
33	8/12	0	34,914	3,656	423,408	12,935	41	15
33B	8/13	0	35,460	4,120	463,025	13,374	44	15
33C	8/15	0	27,621	2,722	309,909	13,852	39	15
33D	8/16	0	25,710	3,024	381,688	17,375	45	15
33E	8/17	0	21,089	2,682	262,522	12,452	31	15
33F	8/18	0	25,257	4,167	342,709	19,095	46	15
34	8/20	0	12,812	1,436	138,759	9,537	20	15
34B	8/21	0	14,005	1,701	147,918	11,292	24	15
34C	8/22	0	4,540	391	37,274	2,599	9	15
34D	8/23	0	16,071	1,624	172,144	12,977	30	15
35	8/26	0	22,604	3,442	169,048	18,307	24	39
35B	8/30	0	6,534	2,617	52,462	12,441	10	39
Weeks 27-30		1,626	112,135	14,507	994,168	118,590	68	50
Weeks 31-35		7,659	658,531	70,830	10,348,435	304,750	121	372
Total Season		9,285	770,666	85,337	11,342,603	423,340	122	422

Table 11. Fishing opportunity, effort, and sockeye harvests prior to Week 31 in the District 104 purse seine fishery, 1980 to 2007.

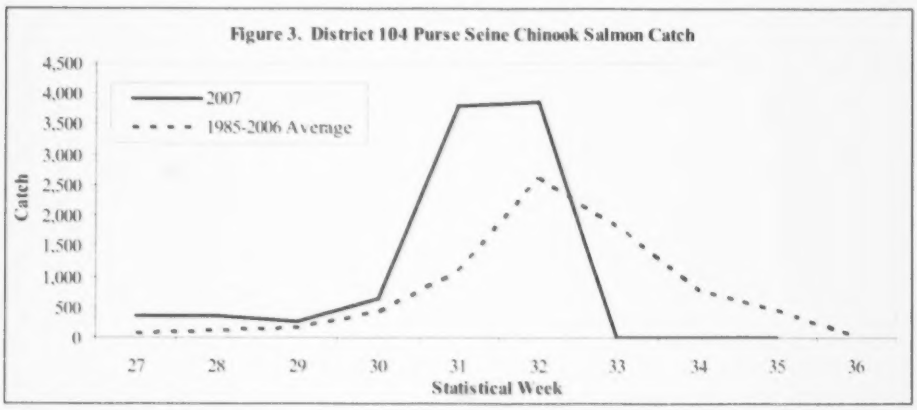
Week/ Opening	Start Date	Chinook	Sockeye	Coho	Pink	Chum	Boats	Hours
27	7/1	364	7,406	3,066	40,542	19,415	23	12
28	7/8	361	17,547	2,906	78,627	38,210	35	12
29	7/15	262	21,619	3,414	125,917	22,897	49	8
30	7/22	386	42,332	3,789	547,055	27,251	48	12
30B	7/26	253	23,231	1,332	202,027	10,817	27	6
31	7/29	766	60,588	8,404	1,507,787	29,409	82	15
31B	8/1	3,023	146,272	11,643	2,757,603	49,629	82	39
32	8/5	1,163	54,641	3,668	703,388	17,469	55	15
32B	8/6	841	28,761	2,586	540,314	10,620	39	15
32C	8/7	941	23,957	3,075	479,393	8,929	33	15
32D	8/8	922	26,790	3,739	576,163	9,946	46	15
32E	8/10	0	35,016	2,456	411,234	9,208	37	15
32F	8/11	0	35,889	3,677	471,687	13,304	46	15
33	8/12	0	34,914	3,656	423,408	12,935	41	15
33B	8/13	0	35,460	4,120	463,025	13,374	44	15
33C	8/15	0	27,621	2,722	309,909	13,852	39	15
33D	8/16	0	25,710	3,024	381,688	17,375	45	15
33E	8/17	0	21,089	2,682	262,522	12,452	31	15
33F	8/18	0	25,257	4,167	342,709	19,095	46	15
34	8/20	0	12,812	1,436	138,759	9,537	20	15
34B	8/21	0	14,005	1,701	147,918	11,292	24	15
34C	8/22	0	4,540	391	37,274	2,599	9	15
34D	8/23	0	16,071	1,624	172,144	12,977	30	15
35	8/26	0	22,604	3,442	169,048	18,307	24	39
35B	8/30	0	6,534	2,617	52,462	12,441	10	39
Weeks 27-30		1,626	112,135	14,507	994,168	118,590	68	50
Weeks 31-35		7,659	658,531	70,830	10,348,435	304,750	121	372
Total Season		9,285	770,666	85,337	11,342,603	423,340	122	422

In the 2007 season, the District 104 purse seine fishery harvested 11,342,603 pink salmon, 770,666 sockeye, 85,337 coho, 423,340 chum, and 9,285 Chinook salmon. During the 2007 season, 122 purse seine vessels fished in District 104, up from a low of 60 in 2004. Boat-days fished was below the 1985-2006 average during the week 27-30 treaty period, above average from weeks 31-33, falling to below average for the remainder of the season. The number of boats fishing was below average throughout the season (Figure 2).

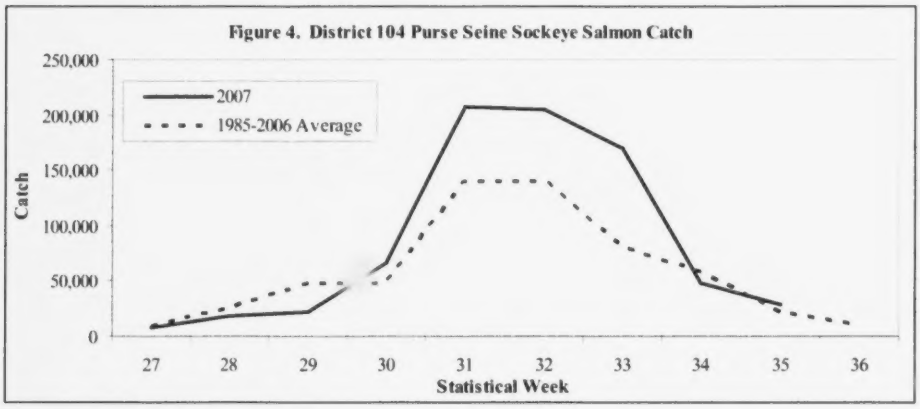




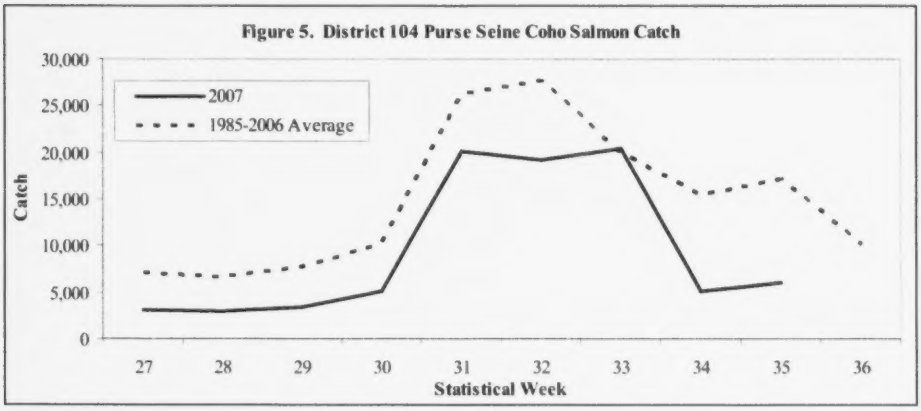
The catch of Chinook salmon in the District 104 purse seine fishery was above average until the non-retention period began in week 33.



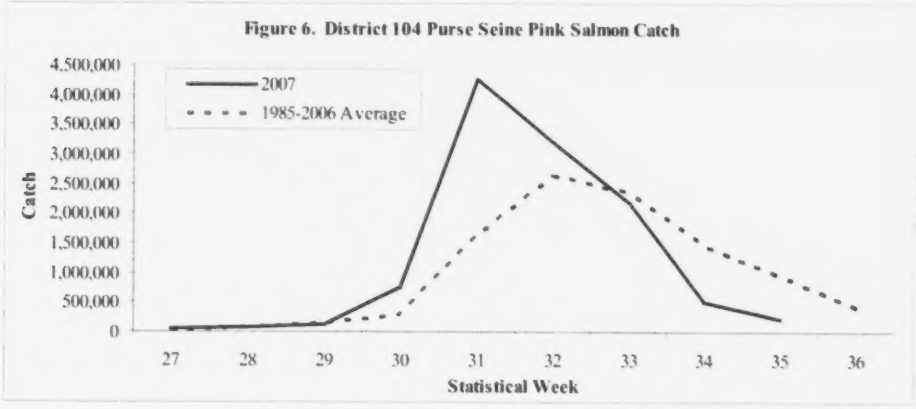
During the treaty period, the catch of sockeye salmon was below average the first three weeks and above average in the final week. Catches were significantly above average after the treaty period in weeks 31-33 (Figure 4).



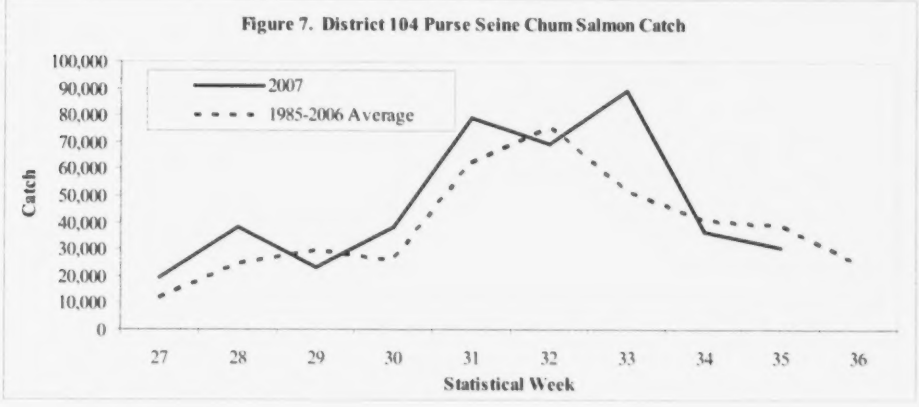
With exception of week 33, the catch of coho salmon in the District 104 purse seine fishery was below average throughout the season (Figure 5).



The catch of pink salmon was above average from week 30-32 but fell below average in the latter part of the season (Figure 6)



Catches of chum salmon in the District 104 fishery were close to average throughout the season (Figure 7).



District 101 Drift Gillnet Fishery

The June 30, 1999 PST agreement calls for abundance based management of the District 101 (Tree Point) drift gillnet fishery. The agreement specifies a harvest of 13.8 percent of the AAH of the Nass River sockeye run. For the 2007 season, DFO forecast a total return of 828,000 Nass River sockeye salmon. The AAH is calculated as the total run of Nass sockeye salmon minus either the escapement requirement of 200,000 or the actual inriver escapement, whichever is less.

The District 101 drift gillnet fishery opens by regulation on the third Sunday in June. During the early weeks of the fishery, management is based on the run strength of Alaska wild stock chum and sockeye salmon and on the strength of the Nass River sockeye salmon. Beginning in the third week of July, when pink salmon stocks begin to enter the

fishery in large numbers, management emphasis shifts by regulation to that species. By regulation, the District 101 Pink Salmon Management Plan sets gillnet fishing time in this district in relation to the District 101 purse seine fishing time when both fleets are concurrently harvesting the same pink salmon stocks.

A total of 66,822 sockeye salmon were harvested in the District 101 drift gillnet fishery in 2007 (Table 12). The sockeye harvest was less than half the 1985-2006 average of 145,251. The number of hours fished was slightly above average. The number of boats fishing annually, while still less than half the 1985-2006 average of 125, rose from a treaty period low of 48 in 2006 to 56 in 2007. The final number of Nass River sockeye harvested at Tree Point will not be available until catch, escapement, and stock composition estimates are finalized for the 2007 season.

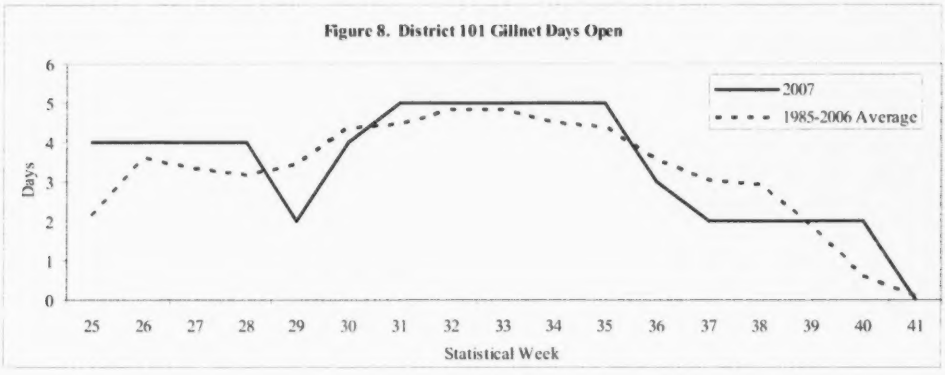
Table 12. Weekly catch and effort in the Alaska District 101 commercial drift gillnet fishery, 2007.

Week	Start Date	Chinook	Sockeye	Coho	Pink	Chum	Boats	Hours
25	17-Jun	444	15,635	1,055	146	5,918	43	96
26	24-Jun	366	5,885	1,220	1,524	7,390	47	96
27	1-Jul	317	7,781	2,279	8,941	14,866	38	96
28	8-Jul	164	7,933	1,634	33,726	36,216	33	96
29	15-Jul	66	3,573	627	25,776	20,811	35	48
30	22-Jul	62	6,215	1,454	52,528	35,057	32	96
31	29-Jul	39	10,231	3,733	73,717	27,216	34	120
32	5-Aug	28	5,575	2,728	67,639	16,517	35	120
33	12-Aug	11	2,080	1,308	38,708	6,041	32	120
34	19-Aug	5	825	1,088	26,276	6,958	24	120
35	26-Aug	3	544	1,186	7,273	14,439	22	120
36	2-Sep	2	403	2,058	2,843	19,749	24	72
37	9-Sep	0	120	1,410	438	11,259	27	48
38	16-Sep	0	18	3,472	12	6,433	18	48
39	23-Sep	0	4	2,141	1	4,084	15	48
40	30-Sep	Confidential information, less than three boats fishing					1	48
Total		1,507	66,822	27,503	339,548	233,118	56	1,392
1985-2006 Avg.		1,470	145,251	42,299	560,094	312,304	125	1,323

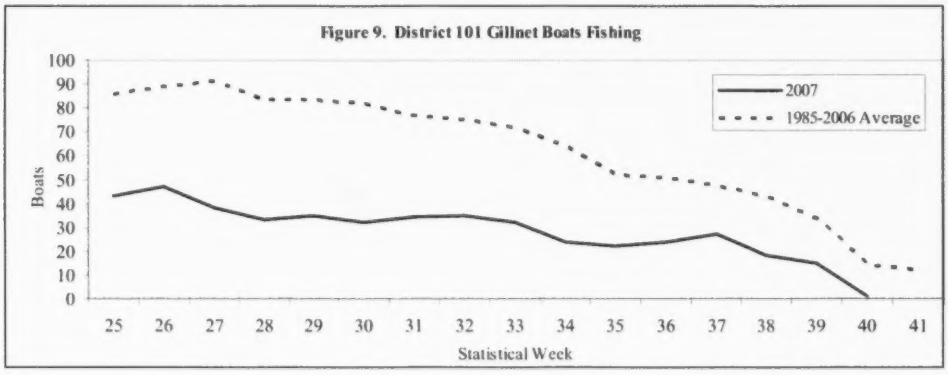
Table 13. Annual sockeye harvest in the Alaska District 101 drift gillnet fishery, 1985 to 2007, and comparison of sockeye harvest and effort (number of boats, hours, and boat-hours fished) between Statistical Weeks 26 and 35 when sockeye salmon are most abundant in this district.

	Total	Catch and Effort between Weeks 26 and 35			
Year	Sockeye Harvest	Sockeye Harvest	Boats	Hours	Boat-Hours
1985	173,100	159,021	153	1,032	157,865
1986	145,699	143,286	198	960	190,044
1987	107,503	106,638	170	615	104,519
1988	116,115	115,888	187	756	141,338
1989	144,936	130,024	176	1,023	180,016
1990	85,691	78,131	150	840	125,969
1991	131,492	123,508	130	984	127,920
1992	244,649	243,878	118	1,080	127,416
1993	394,098	390,299	148	1,032	152,733
1994	100,377	98,725	142	984	139,700
1995	164,294	151,131	128	1,008	129,024
1996	212,403	175,569	129	1,104	142,408
1997	169,474	152,662	128	1,008	129,024
1998	160,506	159,307	124	1,044	129,454
1999	160,028	158,268	118	1,032	121,776
2000	94,651	94,399	95	912	86,640
2001	80,041	62,129	73	1,020	74,445
2002	120,353	106,360	68	1,008	68,544
2003	105,263	96,921	68	1,104	75,058
2004	142,357	141,395	61	1,104	67,332
2005	79,725	75,875	69	1,104	76,162
2006	62,770	53,048	45	840	37,791
Avg. 1985-2006	145,251	137,112	122	981	117,508
2007	66,822	50,642	54	1,032	55,717

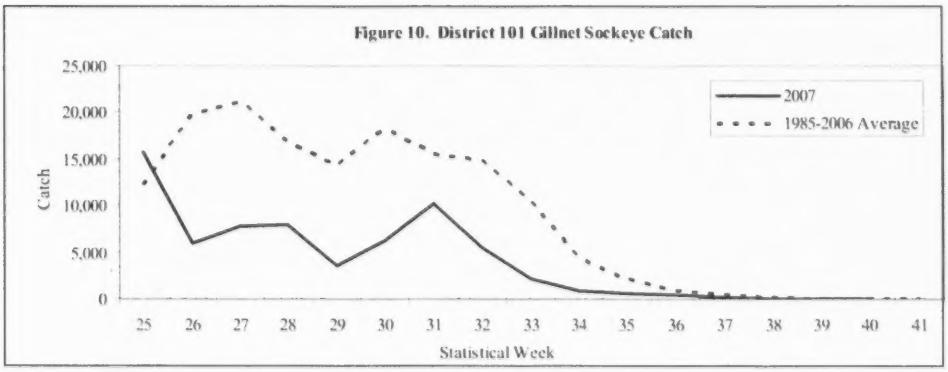
The District 101 gillnet fishery was initially opened Sunday June 17 (Week 25). The durations of weekly openings were close to treaty period (1985-2006) averages throughout the season (Figure 8).



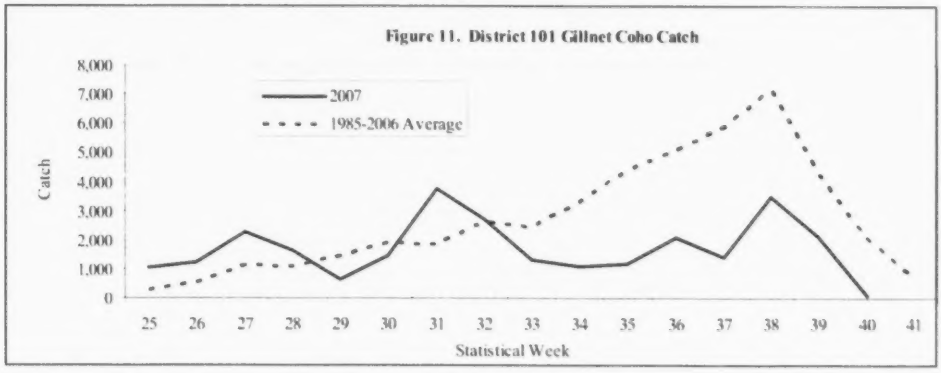
The number of gillnet boats fishing during weekly openings of the District 101 gillnet fishery remained below the 1985-2006 average (Figure 9).



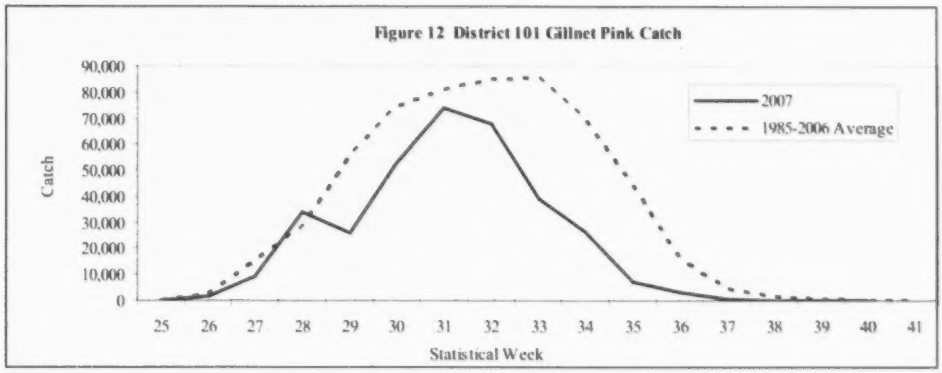
Except for the first week of the season, the 2007 weekly catch of sockeye salmon in the District 101 gillnet fishery was below the treaty period (1985-2006) average (Figure 10). The cumulative sockeye harvest prior to the initiation of the Pink Salmon Management Plan in Week 29 was 37,234 fish, or about 56% of the season's total sockeye harvest.



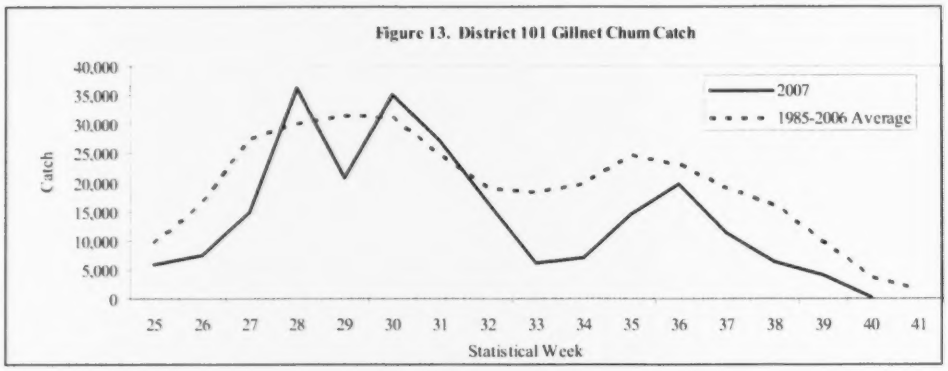
Coho catches were relatively flat throughout the season, above average in four of six weeks in the first half but below average in the last half (Figure 11).



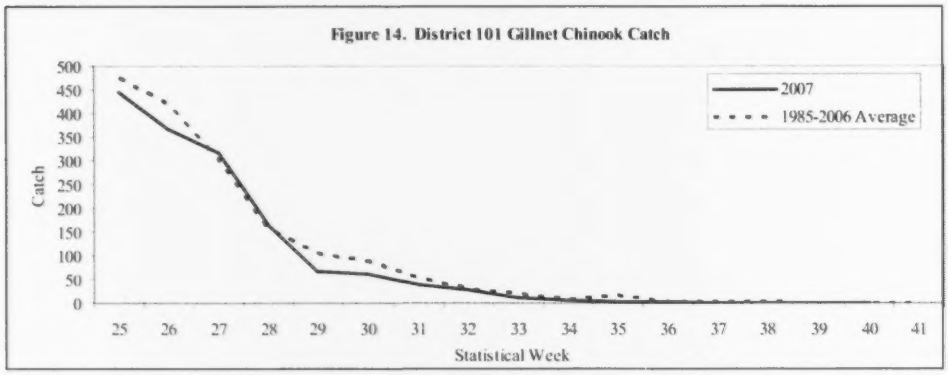
Pink salmon catches, were below the treaty period average throughout the season with the exception week 28 when they were slightly above average (Figure 12).



Chum salmon catches were above average in weeks 28 and 30 but below average the remainder of the season (Figure 13).



Chinook salmon catches were close to the treaty period average throughout the season (Figure 14).



Beginning on September 2 (week 36) the fishery was managed on the strength of fall chum and coho salmon returns; both fall chum and fall coho catches were below average during this period and fishing time was reduced accordingly. Below average fall chum and coho salmon catches are, in part, a reflection of declining fishing effort at Tree Point.

Escapements

The total 2007 Southeast Alaska pink salmon escapement index of 18.0 million index fish ranked 6th highest since 1960. The total index was just about equal to the recent 10-year average of 17.7 million, but was the lowest odd-year index since 1997. Biological escapement goals were met in all 3 sub-regions (Table 14). Escapement indices were 20% above the recent 10-year average in the Southern Southeast sub-region, and were strongest to the Ketchikan management area in Districts 1–3. (Table 14). The Southern Southeast sub-region includes all the waters of Districts 1–8. Pink salmon escapement

management targets were met or exceeded for all districts, and were above the recent 10-year average in Districts 1, 2, 3, 7.

Table 14. 2007 Southeast Alaska pink salmon escapement indices, and biological escapement goals by sub-region (in millions).

Sub-region	2007 Pink Salmon Index	Biological Escapement Goal	
		Lower Bound	Upper Bound
Southern Southeast	11.1	4.0	9.0
Northern Southeast Inside	4.7	2.5	5.5
Northern Southeast Outside	2.3	0.75	1.75
Total	18.0		

The Hugh Smith Lake adult sockeye escapement was 34,000, which exceeded the upper end of the biological escapement goal range of 8,000 to 18,000 adult sockeye salmon. Stocked Hugh Smith Lake sockeye salmon comprised 60% of the escapement in 2007. The escapement of sockeye salmon into McDonald Lake was estimated to be 29,000 fish, based on the expanded foot survey index. This is the 6th year in the past 7 that the escapement has been below the escapement goal range of 70,000 to 100,000 sockeye salmon.

Escapement survey information for chum salmon index streams indicated that escapements to Southeast Alaska were generally below average in 2007. The weighted rank index of peak survey estimates to 82 chum salmon streams was 73% of the recent 10-year average (Figure 13). In the Northern Boundary Area, the estimated escapement at Fish Creek, near Hyder, was 14,000; about half the recent 10-year average of 29,000. The escapement index for Cholmondeley Sound fall chum salmon was the second lowest since 1985, and only 20% of the recent 10-year average.

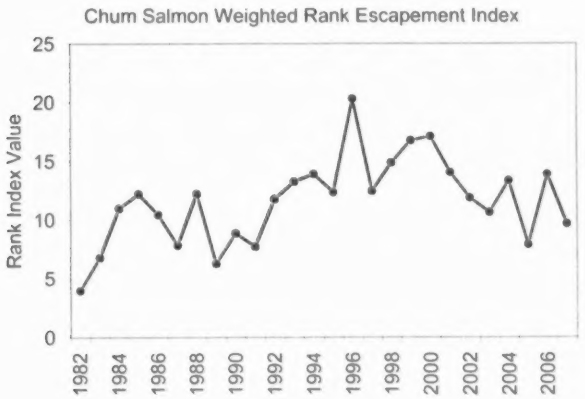


Figure 15. Weighted rank index of annual peak survey estimates of chum salmon in 82 chum salmon streams in Southeast Alaska, 1982–2007.

Transboundary Area Fisheries

Stikine River Area Fisheries

The 2007 harvest in the District 106 commercial gillnet fishery included 1,848 Chinook, 92,461 sockeye, 80,573 coho, 383,319 pink, and 298,108 chum salmon (Table 15). District 106 catches of all species except Chinook and chum were below the 1997-2006 average (Figures 18-21). Lower catches can be partially attributed to a shift in effort from District 106 into District 108 to target returning Stikine Chinook and hatchery chum. Overall, fishing time was slightly above the ten-year average in District 106 and effort was well below average (Figures 16 and 17). An estimated 42% of the coho salmon harvest was of Alaskan hatchery origin.

Table 15. Weekly salmon catch in the Alaskan District 106 commercial drift gillnet fisheries, 2007. Catches do not include Blind Slough terminal area harvests.

Week	Start Date	Chinook	Sockeye	Coho	Pink	Chum	Permits	Days	Permit Days
24	10-Jun	176	1,288	254	93	659	14	2	28
25	17-Jun	629	20,884	5,017	5,292	13,826	55	5	275
26	24-Jun	605	25,320	8,027	17,953	21,648	76	4	304
27	1-Jul	136	5,687	4,857	11,265	17,000	76	3	228
28	8-Jul	133	9,638	6,935	20,195	44,761	78	3	234
29	15-Jul	85	9,490	4,285	52,642	52,660	77	3	231
30	22-Jul	50	6,723	2,809	32,732	33,844	60	2	120
31	29-Jul	9	2,701	1,244	31,217	9,158	32	2	64
32	5-Aug	4	2,803	1,067	28,959	7,721	31	2	62
33	12-Aug	4	3,971	2,793	80,769	7,312	57	4	228
34	19-Aug	2	2,361	3,946	71,771	16,677	44	4	176
35	26-Aug	2	1,121	4,850	24,762	20,744	66	4	264
36	2-Sep	2	356	6,972	4,762	21,001	69	2	138
37	9-Sep	1	76	7,277	842	16,667	74	2	148
38	16-Sep	4	37	12,243	64	10,114	54	2	108
39	23-Sep	3	5	6,696	1	3,868	33	3	99
40	30-Sep	3	0	1,301	0	448	17	2	34
Total 2007		1,848	92,461	80,573	383,319	298,108	153	49	2,741
1997-2006 Average		1,134	113,235	159,942	417,493	244,055	169	47	3,341
2007 as % of Average		163%	82%	50%	92%	122%	91%	104%	82%

Figure 16. District 106 Gillnet Days Open

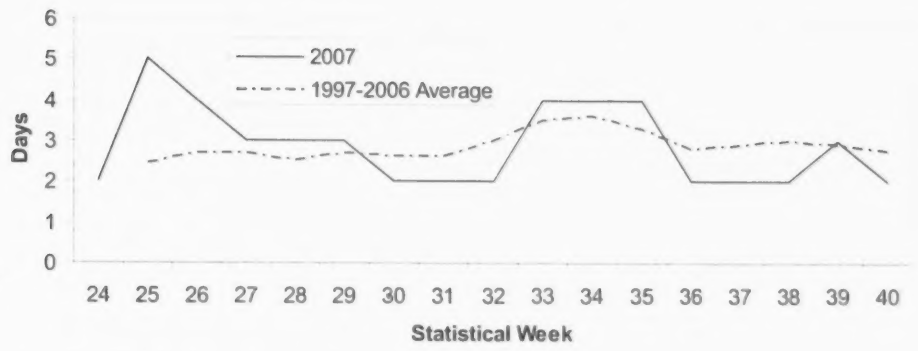


Figure 17. District 106 Gillnet Boats Fishing

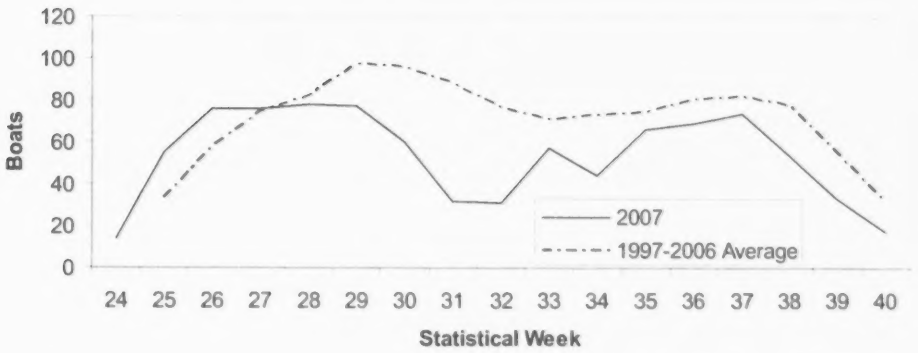


Figure 18. District 106 Gillnet Sockeye Catch

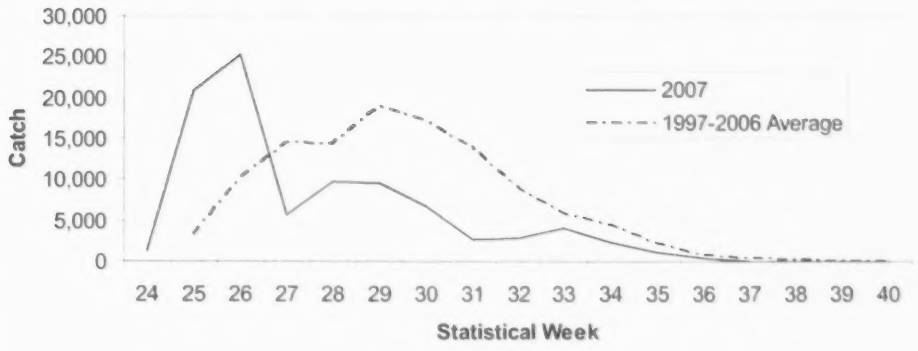


Figure 19. District 106 Gillnet Coho Catch

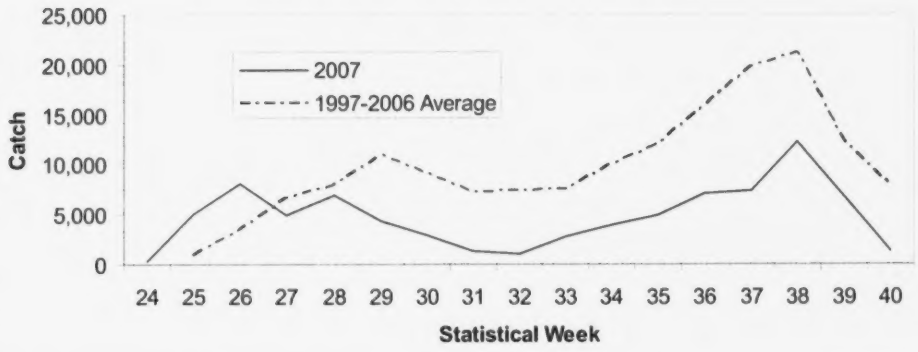


Figure 20. District 106 Gillnet Pink Catch

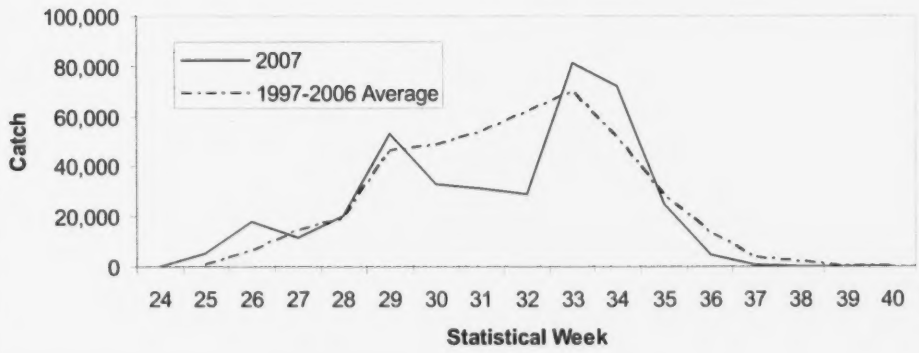
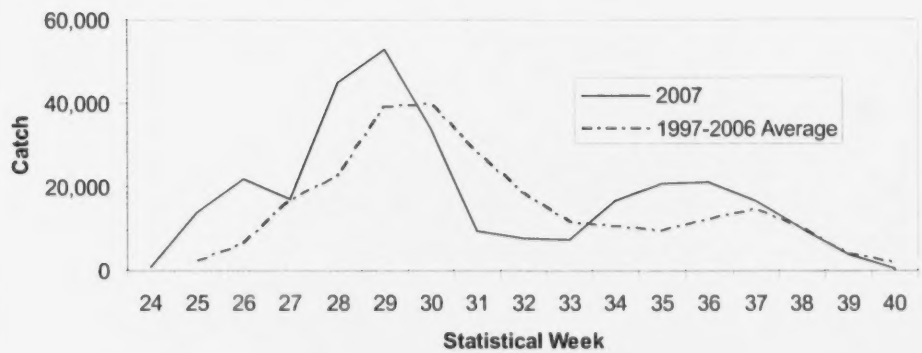


Figure 21. District 106 Gillnet Chum Catch



In the 2007 District 108 fishery, 16,933 Chinook, 70,578 sockeye, 19,880 coho, 39,688 pink, and 177,571 chum salmon were harvested (Table 16). Chinook, sockeye, and chum harvests were above the ten-year average while coho and pink harvests were below average (Figures 24-27)). Overall, fishing time and effort were above-average throughout the season (Figures 22 and 23). An estimated 40% of the coho salmon harvest was of Alaskan hatchery origin.

The third consecutive commercial directed Stikine River Chinook drift gillnet fishery in recent years occurred in statistical weeks 19 through 23 of the 2007 season. The fishery was limited to the waters in District 108, as was the case in 2005 and 2006, in order to target adult Stikine Chinook. One-day openings occurred in each week and openings generally began on Monday and ended on Tuesday. One hundred four vessels made landings of Chinook over the course of the fishery. The 2007 directed Stikine Chinook salmon gillnet fishery harvested a total of 16,700 large fish through statistical week 29; of this total, 9,965 large fish were treaty fish (i.e. wild Stikine fish).

Table 16. Weekly salmon catch and effort in the Alaskan District 108 commercial drift gillnet fishery, 2007. The permit days are adjusted for boats that fished only the midweek openings. 2007 Chinook % of avg. reflects the directed fishery.

Week	Start Date	Chinook	Sockeye	Coho	Pink	Chum	Permits	Days	Permit Days
19	7-May	260	0	0	0	0	37	1	37
20	14-May	409	0	0	0	5	52	1	52
21	21-May	919	1	1	0	1	76	1	76
22	29-May	1,387	7	0	0	1	83	1	83
23	4-Jun	1,754	18	0	0	1	86	1	86
24	10-Jun	5,272	412	1	0	13	87	2	174
25	17-Jun	1,311	11,134	177	93	308	40	5	200
26	24-Jun	3,112	22,120	496	653	4,780	69	5	280
27	1-Jul	1,026	14,654	1,514	1,446	9,329	78	4	279
28	8-Jul	594	9,162	1,436	2,541	27,616	67	3	201
29	15-Jul	656	5,899	335	7,040	34,016	61	3	183
30	22-Jul	121	3,300	356	7,559	31,177	63	2	126
31	29-Jul	63	2,116	370	6,223	36,304	60	2	120
32	5-Aug	25	869	737	5,064	18,059	54	2	108
33	12-Aug	16	478	1,044	4,393	8,914	35	4	140
34	19-Aug	3	189	1,157	823	1,028	19	4	76
35	26-Aug	4	169	1,505	2,613	2,184	31	4	124
36	2-Sep	0	45	1,705	1,176	1,095	27	2	54
37	9-Sep	1	2	1,577	62	1,478	26	2	52
38	16-Sep	0	1	2,429	1	505	23	2	46
39	23-Sep	0	2	4,612	1	712	36	3	108
40	30-Sep	0	0	428	0	45	10	2	20
Total 2007		16,933	70,578	19,880	39,688	177,571	147	56	2,625
1997-2006 Average		6,847	47,464	22,934	43,839	82,837	119	49	1,787
2007 as % of Avg.		247%	149%	87%	91%	214%	124%	114%	147%

Figure 22. District 108 Gillnet Days Open

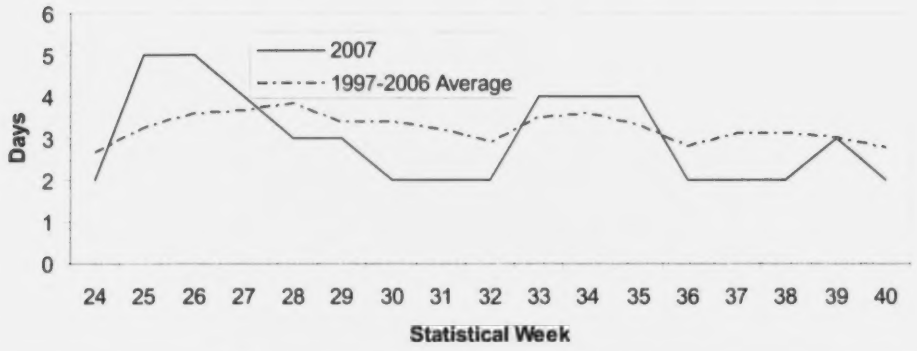


Figure 23. District 108 Gillnet Boats Fishing

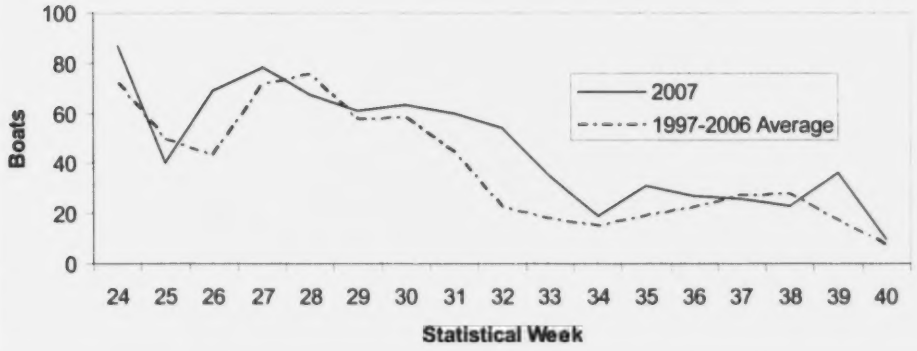


Figure 24. District 108 Gillnet Sockeye Catch

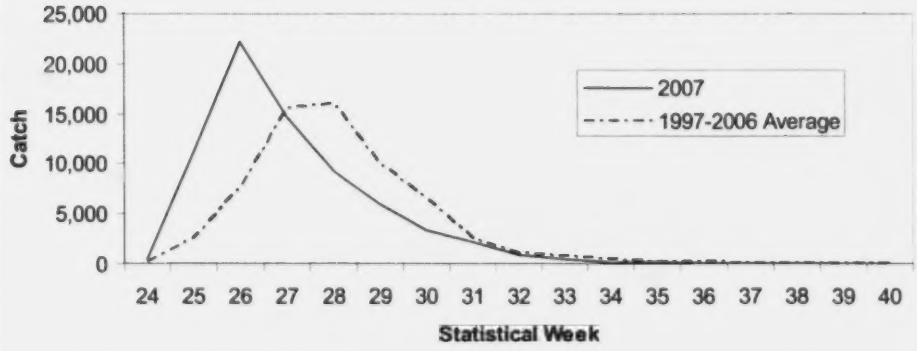


Figure 25. District 108 Gillnet Coho Catch

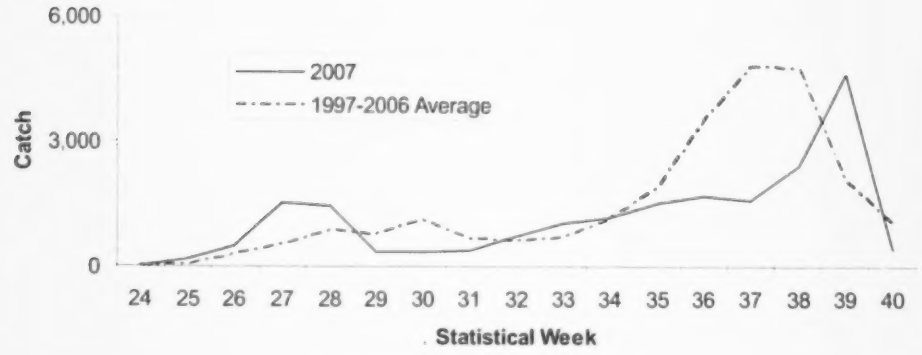


Figure 26. District 108 Gillnet Pink Catch

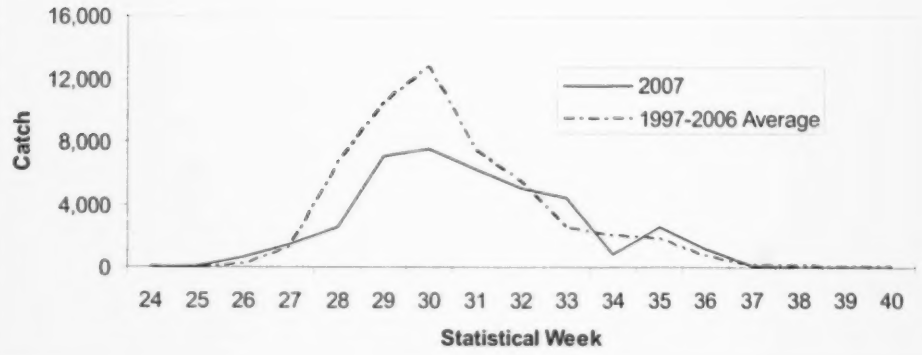
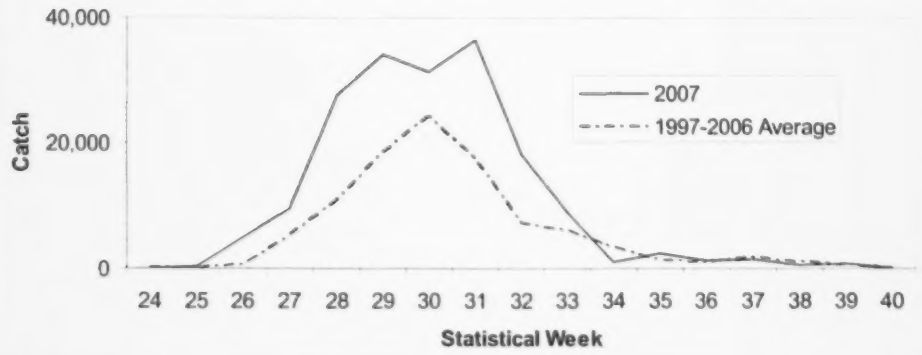


Figure 27. District 108 Gillnet Chum Catch



Harvest sharing of Stikine sockeye stocks is based on inseason abundance forecasts produced by the Stikine Management Model (SMM) (Table 17). The marine and inriver catches of planted Tuya fish were estimated from analysis of otoliths for thermal marks. Egg diameter analysis of inriver catches was used to estimate the relative abundances of Tahltan and Mainstem fish to Tuya fish in the Stikine River. The historical average weekly stock compositions were used to estimate the harvests of Tahltan and Mainstem Stikine sockeye salmon stocks in marine harvests. Based on these analyses and ratios, the Sumner Strait fishery (subdistricts 106-41 & 42) harvested 38,000 Stikine sockeye salmon, 52% of the total sockeye harvest in those subdistricts. The Clarence Strait fishery (subdistrict 106-30) harvested an estimated 2,000 Stikine sockeye salmon, 10% of the harvest in that subdistrict. It is estimated that the District 108 fishery harvested 61,000 Stikine fish, 87% of the total sockeye harvest in that area. With 39 of 48 federal harvest permits reporting the current sockeye subsistence harvest for the Stikine River is 215 fish; the subsistence cap for the river is 600 sockeye salmon. An estimated 101,000 Stikine sockeye salmon were harvested in commercial gillnet fisheries from both districts, representing 62% of the total sockeye catch. Of these Stikine sockeye salmon, an estimated 61,000 fish were produced by the joint U.S./Canada fry-planting projects on the Stikine River.

Preliminary postseason run reconstruction estimates are not yet available (Table 18) but will differ from the inseason management model estimates (Table 17).

Table 17. Weekly forecasts of run size and total allowable catch for Stikine River sockeye salmon as determined inseason by the Stikine Management Model, 2007.

Stat.	Start	Forecast	TAC			Cumulative Catches[a]	
Week	Date	Run Size	Total	U.S.	Canada	U.S.	Canada
25	17-Jun	233,600	172,805	86,402	86,402	20,566	379
26	24-Jun	233,600	172,805	86,402	86,402	47,554	3,692
27	1-Jul	238,725	177,574	88,787	88,787	65,934	18,431
28	8-Jul	258,396	198,348	99,174	99,174	85,350	32,621
29	15-Jul	239,698	179,793	89,896	89,896	91,571	35,293
30	22-Jul	216,835	156,492	78,246	78,246	96,720	43,859
31	29-Jul	204,821	143,913	71,956	71,956	104,440	48,561
32	5-Aug	213,038	151,979	75,989	75,989	100,429	58,660
33	12-Aug	224,729	163,516	81,758	81,758	100,149	61,226
Preliminary end-of-season estimate							
		218,417	156,541	78,271	78,271	101,659	59,237

[a] Does not include test fishery catches

Table 18. Preliminary post season Stikine River run reconstruction, 2007

	Tahltan	Mainstem	Tuya	Total Stikine		Tahltan Wild	Tahltan Hatchery
Escapement[a]	21,074	27,494	7,193	55,762		13,056	8,018
ESSR Catch[b]			0	0			
Biological Samples	200			200		119	81
Broodstock	2,839			2,839		1,320	1,519
Natural Spawning	18,035	27,494		45,529		11,173	6,862
Excesse			7,193	7,193			
Canadian Harvest							
Indian Food	1,736	87	363	2,187		897	840
Upper Commercial	724	36	151	912		374	350
Lower Commercial	35,756	9,063	11,319	56,138		17,743	18,013
Total	38,216	9,187	11,833	59,237		19,013	19,203
% Harvest	36.1%	38.3%	38.1%				
Test Fishery Catch	299	726	83	1,108		145	154
Inriver Run	59,589	37,407	19,110	116,758		32,213	27,376
U.S. Harvest							
106-41&42	29,226	1,454	7,225	37,905	35,189	11,028	18,198
106-30	1,273	504	313	2,090	3,911	707	566
108	37,039	12,793	11,617	61,449	61,289	14,173	22,866
Subsistence	137	35	43	215	215	69	68
Total	67,675	14,786	19,198	101,659	100,604	33,541	33,540
% Harvest	63.9%	61.7%	61.9%				
Test Fishery Catch	0	0	0	0		0	0
Total Run	127,264	52,193	38,308	218,417		65,754	60,915
Escapement Goal	24,000	30,000	0				
Terminal Excess[d]			7,193				
Total TAC	103,264	22,193	31,084	156,541			
Total Harveste	106,190	24,699	31,115	162,004			
Canada TAC	51,632	11,097	15,542	78,271			
Actual Catch[f]	38,216	9,187	11,833	59,237			
% of total TAC	74.0%	82.8%	76.1%	75.7%			
U.S. TAC	51,632	11,097	15,542	78,271			
Actual Catch[fg]	67,675	14,786	19,198	101,659			
% of total TAC	131.1%	133.2%	123.5%	129.9%			

[a] Escapement into terminal and spawning areas from traditional fisheries.

[b] Catch allowed in terminal areas under the Excess Salmon to Spawning Requirement license.

[c] Fish returning to the Tuya system are not able to access the lake where they originated due to velocity barriers.

[d] The number of Tuya fish that should be passed through traditional fisheries in order to harvest the Tuya stock at the same rate as the Tahltan stock to ensure adequate spawning escapement for Tahltan fish.

[e] Includes traditional, ESSR, and test fishery catches.

[f] Does not include test fishery catches.

[g] U.S. harvest estimate differs from Joint Interception Committee estimate because no estimates are made for catches other than in the listed fisheries.

Taku River Area Fisheries

The traditional 2007 District 111 commercial drift gillnet fishery salmon harvest totaled 1,452 Chinook, 112,392 sockeye, 22,394 coho, 100,375 pink, and 590,169 chum salmon (Table 19). Harvest of Chinook, coho, pink and chum salmon was 36%, 83%, 93% and 219% of the ten-year (1997-2006) averages, respectively. The harvest of sockeye salmon was 73% of the ten-year average. Hatchery stocks contributed significantly to the harvest of sockeye and chum salmon, and made minor contributions to the harvest of other species.

Table 19. Weekly salmon harvest in the Alaskan District 111 traditional commercial drift gillnet fishery, 2007.

Stat. Week	Start Date	Chinook [a]	Sockeye	Coho	Pink	Chum	Boats	Days	Boat Days
25	6/17	497	1,862	1	2	3,018	35	2	70
26	6/24	421	5,850	52	250	57,534	46	4	184
27	7/1	222	7,226	41	3,440	70,305	77	4	308
28	7/8	95	9,337	278	10,539	140,315	87	4	348
29	7/15	61	12,535	330	21,003	89,281	93	3	279
30	7/22	52	18,655	137	23,426	124,695	80	4	320
31	7/29	24	18,961	549	13,721	64,328	100	3	300
32	8/5	31	20,409	2,114	19,086	24,538	105	4	420
33	8/12	21	11,307	2,768	7,057	7,829	112	4	448
34	8/19	14	2,883	2,138	1,737	3,513	56	4	224
35	8/26	8	2,081	6,590	84	1,474	52	4	208
36	9/2	2	1,156	4,442	26	2,589	50	4	200
37	9/9	4	117	2,117	4	660	31	4	124
38	9/16	0	12	498	0	57	11	4	44
39	9/23	0	1	259	0	33	4	4	16
40	9/30	Confidential information, less than three boats fishing					2	4	8
41	10/7	Confidential information, less than three boats fishing					1	4	4
Total		1,452	112,392	22,394	100,375	590,169	168	64	3,504
1997-2006 Average		4,043	154,652	26,825	116,047	281,547	168	57	3,400
2007 as % of 10 year avg.		36%	73%	83%	86%	210%	100%	112%	103%

[a] Chinook salmon catch includes Harvest Code 411.

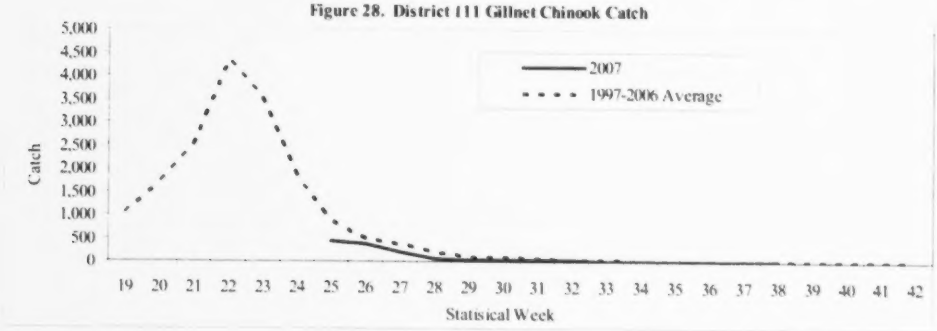
[b] The days open listed in this table reflect open fishing periods for all waters of District 11 except Speel Arm THA (111-33).

The Speel Arm Terminal Harvest Area (THA) was not open to commercial fishing in 2007.

In 2007, there were no directed District 111 Taku River Chinook salmon fisheries due to pre-season and early season estimates of low Chinook returns which did not allow for any US Allowed Catch (AC). The US AC is determined by a Pacific Salmon Commission bilaterally agreed on formula based, during the early season, on the pre-season Taku Chinook salmon run estimate, and revised in-season based on the in-season run projection estimates generated from the Canyon Island mark-recapture program. The traditional District 111 gillnet fishery on all species opened Sunday June 17 (week 25).

The total number of Chinook salmon harvest in traditional District 111 drift gillnet fishery in 2007 was 1,452 fish. Chinook harvests for weeks 25-41 were 65% of the 2,241 fish ten year average for this period. Preliminary coded wire tag (CWT) analysis indicates Alaska hatcheries contributed approximately 340 fish, or 23% of the total 2007 District 111 Chinook salmon harvest.

Figure 28. District 111 Gillnet Chinook Catch



In the 2007 District 111 traditional drift gillnet fishery approximately 87.8% of the Chinook salmon (includes jacks) were harvested from Taku Inlet, 11.6% were harvested from Stephens Passage, and 0.6% were harvested from Port Snettisham. The preliminary 2007 estimate of large Taku River Chinook salmon escapement is 20,267, 33% of the ten-year (1997-2006) average of 60,676. The escapement goal range is from 30,000 to 55,000 large Chinook salmon.

The total 2007 Taku River sockeye salmon run was estimated at 163,896 fish (Table 20). Based on the escapement goal midpoint of 75,000 wild Taku River sockeye, the TAC was 88,896 fish. The U.S. TAC was 68,734 Taku River sockeye (78% of the TAC). It is estimated that the total U.S. harvest of Taku River sockeye salmon was 66,696 fish, 75% of the TAC. Sockeye salmon produced from a joint U.S./Canada fry-planting program at Tatsamenie Lake contributed an estimated 3,691 fish, or 3.4% of the total sockeye catch. An estimated 29,852 Snettisham Hatchery sockeye salmon were harvested in common property traditional fisheries in District 111 with an additional 4,220 Snettisham Hatchery sockeye salmon were harvested in traditional fisheries inside Port Snettisham.

The preliminary 2007 estimated above-border in-river wild Taku River sockeye run, based on mark-recapture estimates at Canyon Island, was 98,700 sockeye salmon.

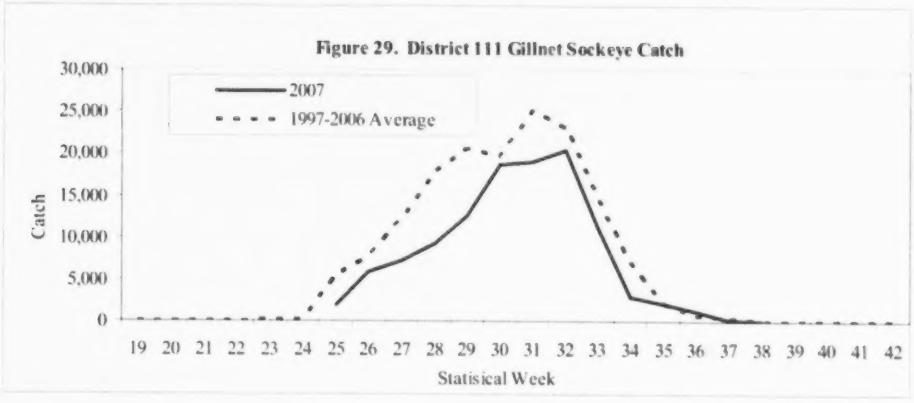
Subtracting the Canadian catch of 16,525 sockeye salmon the escapement was 82,175 fish, 7,000 fish above the escapement goal of 75,000 fish. Preliminary 2007 Taku River sockeye escapements for enumerated systems were approximately: Trapper Lake 7,153; Kuthai Lake 204; Tatsamenie Lake 11,187, and King Salmon Lake 5 fish. Due to record high waters this season, there is concern that fish may not have been able to reach the spawning grounds. Escapements of sockeye salmon to Port Snettisham systems were poor, with the 3,099 counted through a weir at Speel Lake being below the lower bound of the 4,000-13,000 fish escapement goal. The Crescent Lake sonar reported a net upstream count of approximately 1,800 fish, which was not separable by species. It is known that all species of Pacific salmon do enter Crescent Lake, however sockeye is the predominant species.

Table 20. Preliminary Taku sockeye salmon run reconstruction, 2007. {Estimates do not include spawning escapements below the U.S./Canada border.

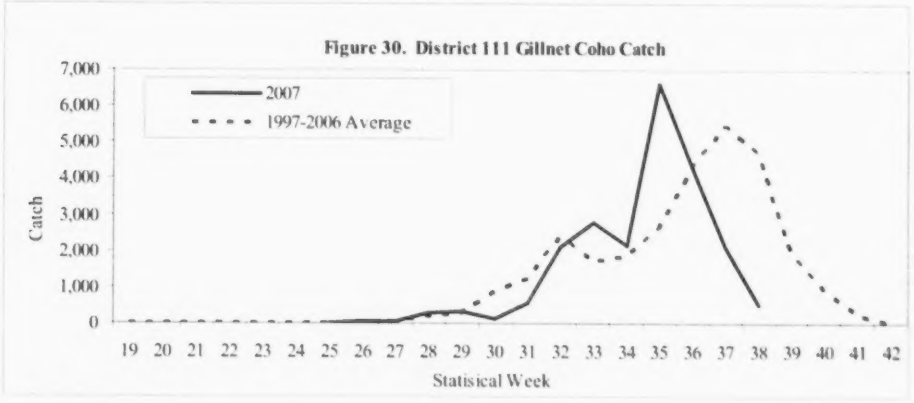
	Taku[a]
Estimated Taku In-river Run	98,700
Estimated U.S. Catch Taku fish	66,696
Total Run	163,896
Escapement Goal	75,000
Escapement	82,175
TAC	88,896
U.S. TAC	68,734
U.S. harvest share (catch/total TAC)	0.750
Canada TAC	20,163
from .18 of total TAC	20,163
from .20 of inriver run >100,000	0
Estimated Canada catch	16,525
Canada harvest share (cat/total TAC)	0.186

[a] United States and Canada TAC computations based on harvest sharing arrangement described in Annex IV, Chapter 1, (3)(b)(1)(i).

The 2007 sockeye catch in the District 111 drift gillnet fishery was 112,392 which is 73% of the 1997-2006 average. Sockeye catches were below average throughout the season (Figure 29).



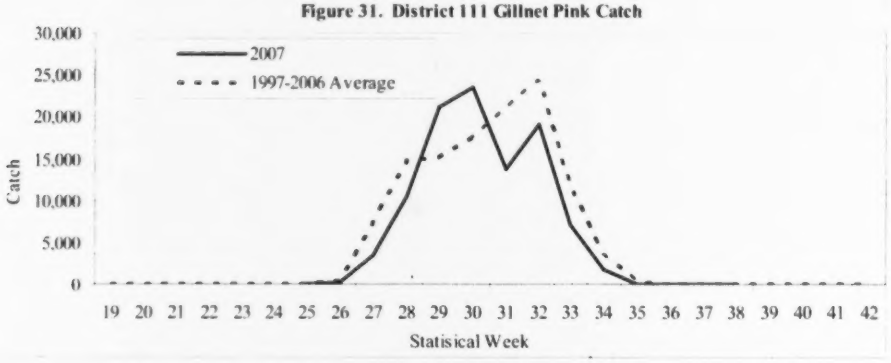
Coho stocks harvested in District 111 include runs to the Taku River, Port Snettisham, Stephens Passage, and local Juneau area streams as well as Alaskan hatcheries. The 2007 coho harvest of 21,928 fish was 82% of the 10-year (1997-2006) average (Figure 30). Approximately 81% of the coho were harvested in Taku Inlet (equaling the ten-year average of 81%); 18% were harvested from Stephens Passage and 1% were harvested from inside Port Snettisham. Alaskan hatchery coho salmon contributed 344 fish or 3% of the District 111 harvest. Weekly coho harvests were below average early in the season during weeks 25-32, above average between weeks 33-35, and below average from week 36 through the end of the season. The week 35 harvest of 6,590 fish was the peak week of coho harvest for the 2007 drift gillnet fishery. For most of the season, weekly estimates of Taku River coho abundance indicated a below average run size. The inriver abundance estimate of coho salmon above Canyon Island was 57,625, 51% of the ten-year (1996-7-2006) average of 113,111. The cumulative Canadian coho harvest was approximately 7,838 fish. The coho escapement for the Taku River was estimated to be approximately 49,787 fish, surpassing the minimum in-river goal of 38,000.



The District 111 pink salmon harvest of 100,375 fish was 86% of the ten-year (1997-2006) average (Figure 31). The 2007 pink salmon escapement to the Taku River was unknown; however, the number of pink salmon passing through the fish wheels at Canyon Island was used as an index of escapement. The 2005 (parent year) Canyon

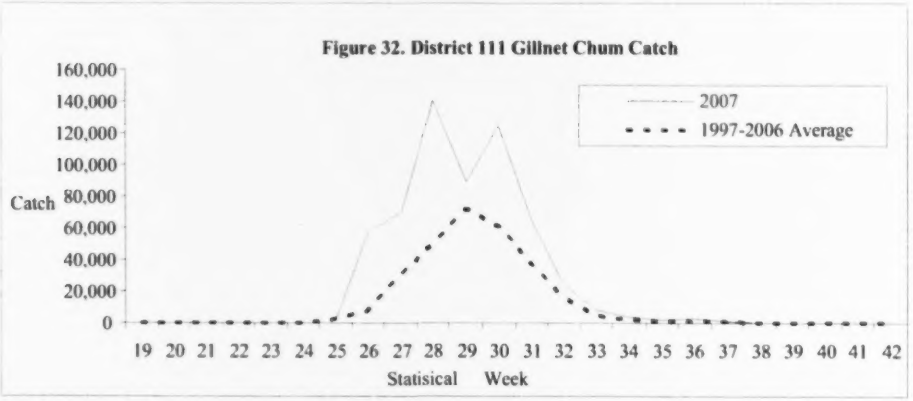
Island pink salmon fish wheel catch was 15,839. The 2007 Canyon Island pink salmon fish wheel catch of 12,405 was 69% of the 1985-2005 odd-year average.

Figure 31. District 111 Gillnet Pink Catch



The catch total of 589,914 chum salmon was 210% of the ten-year (1997-2006) average, and was comprised almost entirely of summer run fish (99%) (Figure 32). The summer chum run is considered to last through mid-August (week 33) and is comprised mostly of domestic hatchery fish, with small numbers of wild stock fish contributing. Chum salmon returning both to DIPAC hatcheries in Gastineau Channel and to the DIPAC remote release site at Limestone Inlet contributed a major portion of the harvest, but quantitative contribution estimates are not available. Approximately 66% of the District 111 chum harvest was made in Taku Inlet, 34% in Stephens Passage, and 0.2% inside Port Snettisham. The harvest of 8,071 fall chum salmon (i.e. chum salmon caught after week 33) was 227% of the ten-year (1997-2006) average. Most of these chums are probably of wild Taku and Whiting River origin. Escapement numbers to the Taku River chum are unknown; however, the numbers of fall chums passing through the fish wheels at Canyon Island were used as an index of escapement. The index number for 2007, 482 fall chums is 95% of the 1985-2006 average.

Figure 32. District 111 Gillnet Chum Catch



Several other fisheries in the Juneau area harvested Taku River salmon stocks in 2007. Personal use permits were used to harvest an estimated 1,000 Taku River sockeye salmon. . A number of stocks are known to contribute to the Juneau area sport fishery, including those from the Taku, Chilkat, and King Salmon rivers, and local hatchery stocks, but the major contributor of large, wild mature fish was believed to be the Taku River. Of Chinook harvested in the 2006 Juneau area sport fishery, the preliminary estimate is that 1,416 were of Taku River origin based on coded wire tag analysis and maturity data.

Alsek River Area Fisheries

Although harvest sharing arrangements of Alsek salmon stocks between Canada and the U.S. have not been specified, Annex IV of the Pacific Salmon Treaty does call for a cooperative attempt to rebuild depressed Chinook and early-run sockeye stocks. Preseason expectations were for below average returns of sockeye and Chinook salmon. These expectations were based on parent-year escapements to the Klukshu River. The Alsek River commercial fishery opened on the first Sunday in June, statistical week 23 (June 4). The initial opening remained at 24 hours. The fishery was extended to 72 hours during statistical week 24 as initial sockeye salmon CPUE was almost triple the average. The opening for week 25 remained at 24 hours. Fishing time was extended to 48 hours for the last week of June and the first week of July before returning to one 24-hour period for the next two weeks of the season. Effort in the Alsek River became minimal from this point on. The fishery targeted coho salmon after mid-August and fishing times remained at three days per week for the entire coho salmon season. Although the Alsek River remained open through the third week in October, no effort was recorded after September 30.

The 2007 Dry Bay commercial set-gillnet fishery harvested 400 Chinook, 19,775 sockeye, and 134 coho salmon (Table 21). No pink or chum salmon were harvested. A test fishery was conducted on the Alsek River for Chinook salmon in 2007, and that fishery produced another 347 Chinook and 367 sockeye salmon, for a total harvest of 747 Chinook and 20,162 sockeye salmon. The Chinook salmon harvest was above the 1997-2006 average, the sockeye salmon harvest was also above average. The coho salmon harvest was far below average. Very little effort was recorded during the coho season due to market conditions and the coho salmon harvest was the second lowest in the last 10 years. The number of fishing days was 48. The total effort expended in the fishery was 311 boat-days, which was slightly above average.

Table 21. Weekly catch and effort in the U.S. commercial fishery in the Alsek River, 2007.

Statistical Week	Start Date	Catch Chinook	Sockeye	Coho	Pink	Chum	Permits	Effort Days	Permit Days
23	3-Jun	40	145	0	0	0	10	1	10
24	10-Jun	142	826	0	0	0	10	2	20
25	17-Jun	124	5,333	0	0	0	12	3	36
26	24-Jun	47	4,402	0	0	0	13	2	26
27	1-Jul	14	3,149	0	0	0	15	2	30
28	8-Jul	8	2,089	4	0	0	10	2	20
29	15-Jul	24	2,339	6	0	0	9	2	18
30	22-Jul	1	855	0	0	0	6	1	6
31-33	29-Jul	0	597	2	0	0	5	8	40
34-38	19-Aug	0	56	122	0	0	7	15	105
39-41	23-Sep	Not	Fished					9	0
Total[a]		747	20,162	134	0	0	21	48	311
1997-2006 Average		591	16,796	4,397	2	44	21	53	304
2007 as % of Avg.		126%	120%	3%	0%	0%	100%	91%	102%

[a] Totals include fish taken in test fishery prior to statistical week 24.

Southeast Alaska Chinook Salmon Fishery

The 2007 preseason Chinook salmon target harvest level was determined using the abundance index of 1.60 generated with the CTC model calibration #0705. The corresponding target harvest of 329,400 was identified using Table 1 of Chapter 3. The preliminary estimate of the 2007 Chinook salmon harvest by all Southeast Alaska fisheries was 397,940 fish (Table 22). The treaty harvest (total minus the add-on and terminal exclusion harvest) was 317,235 fish, 3.7% below the target harvest of 329,400.

Table 22. Chinook all-gear harvests[1] in Southeast Alaska, 1987 to 2007, and deviation from the ceiling for years for which there were ceilings. Harvests are in thousands.

Year	Total Harvest	Add-on and Exclusion Harvest	Target Treaty Harvest	Treaty Harvest	Deviation Number	Deviation Percent
1987	282.4	17.1	263.0	265.3	2.3	0.9%
1988	279.3	22.5	263.0	256.8	-7.8	-3.0%
1989	291.0	21.5	263.0	269.5	6.5	2.5%
1990	366.9	45.9	302.0	321.0	19.0	6.3%
1991	359.5	61.5	273.0	298.0	25.0	9.2%
1992	258.8	36.8	227.4	222.0	-5.4	-2.4%
1993	304.1	32.9	263.0	271.2	8.2	3.1%
1994	264.4	29.2	240.0	235.2	-4.8	-2.0%
1995	235.7	58.8		176.9		
1996	236.3	81.3		155.0		
1997	343.0	56.3		286.7		
1998	270.6	27.4	260.0	243.2	-16.8	-6.5%
1999	251.0	52.2	184.2	198.8	14.6	7.9%
2000	263.3	76.8	178.5	186.5	8.0	4.5%
2001	265.7	78.8	250.3	186.9	-63.4	-25.3%
2002	426.5	69.4	371.9	357.1	-14.8	-4.0%
2003	439.4	59.3	439.6	380.1	-57.4	-13.1%
2004	506.2	77.4	418.3	428.8	10.5	2.5%
2005	497.9	111.2	416.4	386.7	-29.7	-7.1%
2006	440.7	85.8[2]	354.5	354.8	.4	0.1%
2007	397.9	80.7[2]	329.4	317.2	-12.2	-3.7%

[1] The actual target harvest and deviation cannot be calculated until the CTC completes the postseason calibration.

[2] The 2006 and 2007 exclusion harvests are still preliminary pending genetic stock composition estimates of the District 108 fishery.

Troll Fishery

The winter troll fishery harvested 46,872 Chinook salmon from October 11, 2006 through April 30, 2007. A total of 4,712 fish were from Alaska hatcheries with 3,960 fish counting toward the Alaska hatchery add-on.

Spring fisheries were conducted prior to the July general summer opening. The spring fisheries are designed to increase the harvest of Alaskan hatchery-produced Chinook salmon by allowing trolling in small areas close to the hatchery where these fish concentrate. Terminal fisheries are a portion of the spring fisheries and occur directly in front of hatcheries or at remote release sites. While there is no ceiling on the number of Chinook salmon harvested in the spring fisheries, the take of Treaty Chinook salmon is limited according to the percentage of the Alaskan hatchery fish taken in the fishery. The troll harvests in 2007 were: 1,310 fish in the terminal fisheries, 48,479 fish in the general spring fisheries and a preliminary estimate of 1,200 in the Stikine exclusion fisheries. A total of 38% (18,518) of the Chinook salmon landed in these fisheries were from Alaska hatcheries of which 15,600 counted toward the Alaska hatchery add-on.

In the 2007 summer troll season there were two Chinook salmon retention periods: July 1-20 and August 16-21. The fishery harvested 171,549 Chinook salmon of which 6,314 fish (3.7%) were from Alaska hatcheries (5,310 counting toward the Alaska hatchery add-on).

The total harvest for the troll fishery in the 2007 accounting year was 268,200 Chinook salmon, with 240,900 counting as Treaty harvest.

Net Fisheries

Harvests of Chinook salmon in the net fisheries have primarily been incidental to the harvest of other species and only constituted a small fraction (<1.0%) of the total net harvest of all species. That is still true for the purse seine fishery. As a result of the February, 2005 signing of the transboundary rivers Chinook harvest sharing agreement the drift gillnet fisheries in SEAK regulatory Districts 108 and 111 are allowed to target Chinook salmon returning to the Stikine and Taku Rivers. The directed District 111 Taku Chinook fisheries did not occur in 2007 due to low returns. In 2007, the net fisheries harvested approximately 40,700 Chinook salmon of which approximately 19,350 counted as Treaty harvest. These numbers are very preliminary at this time due to the ongoing genetic stock composition analysis that has not yet been completed.

Recreational Fisheries

The 2007 recreational fishery had an estimated preliminary harvest of 71,500 Chinook salmon of which 53,336 counted as Treaty harvest. The final total and Treaty harvest in the sport fishery for 2007 will be available in late fall of 2008. Comparisons of the 2007 recreational fishery harvest with recent years indicate that the preliminary harvest of 71,500 fish is 9% below the recent five-year average and 2% below the recent ten-year average. During the 2007 recreational fishery, genetic samples were collected from 2,478 large Chinook salmon (28 inches of greater in Total Length), 115 genetic samples from small Chinook salmon (under 28 inches in TL) in Terminal Harvest Areas (THAs), and 327 genetic samples were collected from small Chinook salmon harvested outside of THAs.

The freshwater recreational fishery for Chinook salmon 20 inches or greater in length in the Situk River near Yakutat as of April 20, 2007 was set to catch and release only during the 2007 season due to low projected escapement levels for that system.

Southeast Alaska Coho Salmon Fisheries

Attachment B of the June 30, 1999 U.S.-Canada Agreement relating to the Pacific Salmon Treaty specifies provisions for inseason conservation and information sharing for northern boundary coho salmon. In 2007, troll CPUE in Area 6 in the early weeks of the fishery averaged 43.8, well above the highest boundary area conservation trigger of 22. The mid-July projection of region-wide total commercial harvest was greater than the 1.12 million trigger for an early region-wide troll closure, specified in Alaska Board of Fisheries regulation and the PST conservation agreement.

The 2007 all-gear catch of coho salmon totaled 2.21million fish of which 1.91million (87%) were taken in commercial fisheries (Table 23). The troll catch of 1.375 million fish was well below the 10-year average of 1.60 million fish and accounted for 72% of the commercial catch. Average weekly power troll CPUE averaged 18% lower than the

10-year average and but was relatively strong in the boundary area in earlier weeks. Overall region abundance was well-below average with the weakest observed returns in northern inside areas (Lynn Canal and Stephens Passage). The total return to the Berners River was the lowest on record since 1982 while the Taku River return was the lowest since 1997. The harvest of coho salmon in seine fisheries was 75% of the 10-year average while the drift gillnet harvest was only 60% of the 10-year average. Yakutat returns were well-below recent averages and the set net catch, which was only 44% of average, continued to be constrained by limited fishing on outlying rivers due to high transportation costs. On the other hand, a very preliminary estimate of the Southeast Alaska sport catch of 293,600 fish was 8% above the 10-year average.

Wild production accounted for 1.54 million fish (80%) in the commercial catch compared with a recent 10-year average of 1.99 million fish (81%). Of the estimated hatchery contribution of 391,400 fish, over 99% originated from facilities in Southeast Alaska. Marine survival rates were below average for all indicator systems. Escapement goal ranges were met or exceeded for most indicator stocks. However, peak counts of spawners in the Ketchikan area were highly variable among surveyed streams. The total escapement of 1,224 spawners to Hugh Smith Lake was slightly below the long-term average of 1,305 spawners but above the goal range of 500-1,100 spawners. Exploitation rates for indicator stocks were mixed. The troll fishery exploitation rate of 40% for the Hugh Smith Lake stock was above the long-term average of 36%. However, other fisheries exploited the stock at relatively lower rates, resulting in an all-gear exploitation rate of 61% compared with the long-term average of 66%.

The 2007 region-wide summer troll coho fishery began on July 1 and ended on September 20, with a mid-season closure from August 11-15. A season extension to September 30 was not implemented because of below-average abundance throughout most of the region.

Table 23. Coho salmon harvest in Southeast Alaska in 2007 by gear type (preliminary).

Gear Type	Harvest
Troll	1,375,600
Purse seine	265,400
Drift Gillnet	197,100
Set Gillnet	76,500
Sport (marine and fresh water)	293,600
Total	2,208,200

Preliminary 2007 Chinook and Coho Salmon Catches in Washington and Oregon Fisheries

The 2007 season was conducted under the renewed Annex IV arrangements of the Pacific Salmon Treaty. This report covers the fisheries that occur between Cape Falcon and the U.S./Canadian border. These fisheries are subject to the Chinook Individual Stock Based Management (ISBM) obligations contained within the 1999 Agreement and the Southern Coho Management Plan adopted in 2002.

Descriptions of the preseason planning process, various regional fisheries, their general management constraints, and preliminary estimates of landed catch are listed in the following subsections. Tables 1 and 2 contrast preseason projections of catches with the preliminary estimates of landed catch for Chinook and coho in the various 2007 fisheries of interest to the Pacific Salmon Commission. For historical perspective, catches for those fisheries since 1997 are also presented. Complete 2007 fishery catch reports (e.g., Puget Sound recreational catch estimates) and preliminary estimates of spawning escapements are not available at this time.

Preseason Planning

Southern U.S. regional management coordination occurs within the preseason Pacific Fisheries Management Council process commonly referred to as "North of Falcon". Within this process, participants evaluate the biological and social/economic consequences of options for the outside (ocean) and inside (Puget Sound and in-river) fisheries. The final product is a total fishery package that achieves both domestic and Pacific Salmon Treaty obligations as assessed by our domestic fishery regulation assessment models.

Chinook Salmon Management

Under the 1999 Pacific Salmon Treaty Agreement, Council fisheries are subject to the Individual Stock Based Management provisions of Annex IV, Chapter 3. These provisions require the adult equivalent harvest rate by all U.S. fisheries south of the U.S./Canada border to be reduced by 40% from the 1979-1982 base period for Chinook stocks failing to achieve escapements at or above established escapement goals. Fishing levels and patterns were also constrained to meet provisions of the U.S. Endangered Species Act (ESA) for threatened and endangered Chinook salmon stocks originating from Puget Sound and the Columbia River. The 2007 U.S. ocean fishery seasons in the area north of Cape Falcon, Oregon, were constrained primarily by management objectives for the Snake River, and lower Columbia River natural tule fall Chinook stocks. Puget Sound fisheries were constrained also by the need to meet management objectives for ESA listed Puget Sound Chinook, including the Puyallup River and Stillaguamish River management units.

Coho Salmon Management

All U.S. natural spawning coho management units defined by the Southern Coho Management Plan were forecasted to be in moderate or abundant status, so exploitation rate caps for U.S. fisheries on U.S. management units did not represent a constraint in planning southern U.S. mix-stock fisheries. For the 2007 season, as with seasons since 2003, the low status of the Interior Fraser management unit represented the primary stock of concern with an exploitation rate cap of 10% for the southern U.S. fisheries. In addition, seasons and quota levels for U.S. ocean fisheries were defined primarily by the management objectives of lower Columbia River natural coho.

North of Cape Falcon Ocean Fisheries

Management objectives for Chinook fisheries in this area are to satisfy standards for ESA listed stocks, and to the extent possible, provide for viable ocean and in-river fisheries while protecting depressed Columbia River natural stocks and meeting hatchery fall Chinook brood stock needs. Lower Columbia River and Bonneville Pool hatchery fall Chinook have historically been the major stocks contributing to ocean fishery catches in the North of Cape Falcon area.

Catch quotas were specified by species for Treaty Indian, Non-Treaty commercial and recreational fisheries for Chinook and coho salmon. Quotas for Chinook salmon in 2007 were a result of requirements to protect ESA-listed Snake River fall and lower Columbia River natural tule fall Chinook stocks. Quotas for coho salmon in 2007 were a result of requirements to constrain impacts on Interior Fraser and lower Columbia River coho management units.

Non-Treaty Troll Fishery

Pre-season Non-Tribal troll had quota levels of 16,250 Chinook and 22,400 coho (with healed ad-clip). The preliminary estimates of non-Tribal harvest in the 2007 North of Falcon troll fishery are 15,802 Chinook, (97% of the quota), and 18,371 coho (82% of the quota). Some 11,067 Chinook were harvested in the May 1-June 30 fishery and the remaining 4,735 Chinook were harvested between July 1 and September 16. The coho catch represents harvest in a mark-selective fishery (healed adipose fin-clips).

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Recreational Fisheries

Pre-season quotas for the recreational fishery were 16,250 Chinook and 117,600 coho (with healed ad-clip). Total catches for the ocean recreational fisheries north of Cape Falcon were 9,497 Chinook (58% of the coastwide quota) and 102,221 coho (87% of the coastwide quota). A description of the resulting season structure and catches by management area follows.

Columbia River Ocean Area (Including Oregon)

Ocean Area 1 (Columbia Ocean Area) opened for recreational all-species salmon fishing on Sunday, July 1 with a quota of 58,800 coho (revised inseason to 71,450 following transfers from the Westport area) and a pre-season guideline of 4,300 Chinook. The fishery closed on August 25, then reopened on September 2 through its

automatic closure date, September 30. The catch estimates for Area 1 are 2,222 Chinook (52%) and 65,670 coho (92% of the revised quota). The Chinook minimum size limit was 24 inches, with a sub-area closure in the Columbia Control Zone.

Westport

Ocean Area 2 (Westport) opened for all-species recreational salmon fishing on Sunday, July 1 (through Sept. 16) with a quota of 43,510 coho (revised inseason to 28,510 following transfers to the Columbia River area)and a pre-season guideline of 9,400 Chinook. The Chinook minimum size limit was 24 inches. Grays Harbor Control Zone was closed beginning August 1. The catch estimates for Area 2 are 5,231 Chinook (56%) and 22,916 coho (80% of the revised quota).

La Push

Ocean Area 3 (La Push) opened for all-species recreational salmon fishing on Tuesday, July 3 with a quota of 3,060 coho and a pre-season guideline of 825 Chinook. The fishery closed on its automatic closure date, September 15, and reopened September 22 through October 7. The catch estimates for Area 3 are 579 Chinook (70%) and 2,783 coho (91% of the quota). The Chinook minimum size limit was 24 inches.

Neah Bay

Ocean Area 4 (Neah Bay) opened for all-species recreational salmon fishing on Tuesday, July 3 with a quota of 12,230 coho and a pre-season guideline of 1,725 Chinook. The fishery closed on its automatic closure date, September 15. The catch estimates for Area 4 are 1,464 Chinook (85%) and 10,852 coho (89% of the quota). The Chinook minimum size limit was 24 inches.

Treaty Troll Fishery

The Treaty troll fishery was constrained by a Chinook quota of 35,200 and a coho quota of 38,000. The season was comprised of a May/June Chinook directed fishery and a July 1 through September 4 all species fishery. The season concluded with a catch of 22,976 Chinook (66% of the quota) and 39,933 coho (105% of the quota).

Washington Coastal Terminal Fisheries

North Washington Coastal Rivers

Net and sport fisheries directed at salmon in this region were implemented based upon pre-season, Tribal-State agreements and subject to in-season adjustment. The north coastal rivers net harvest (all by Tribal fisheries) includes catch for the Quillayute, Hoh, Queets, and Quinault rivers. The 2007 commercial net fisheries in north coastal rivers have harvested an estimated 1,243 Chinook and 1,182 coho through November 15. Recreational fishery harvest estimates are unavailable at this time.

Grays Harbor

Net and sport fisheries directed at salmon in Grays Harbor are implemented based upon pre-season, Tribal-State agreements and subject to in-season adjustment.

Harvest for Grays Harbor includes catch from both the Humptulips and Chehalis rivers through November 15. The 2007 Tribal net fisheries have harvested an estimated 77 Chinook salmon and 469 coho salmon. Non-Indian commercial fisheries have harvested 5,33 Chinook salmon and 1,675 coho salmon. Recreational fishery harvest estimates are unavailable at this time.

Columbia River Fisheries

Treaty-Indian and non-Indian commercial and sport fisheries for Chinook and coho in 2007 occurred during the winter/spring (February-June 15), summer (June16-July) and fall (August-October) periods. All fisheries were constrained by impacts on ESA-listed stocks. Winter/spring fisheries were primarily constrained by impacts on ESA-listed upper Columbia River, Snake River spring/summer Chinook and wild winter steelhead. Summer fisheries were constrained by impacts to ESA-listed Snake River sockeye and wild Snake River steelhead. Fall fisheries were constrained by impacts to ESA-listed wild Snake River and Coweeman fall Chinook.

Winter-Spring Fisheries

Non-Indian Commercial

The non-Indian winter commercial fishery was conducted as a selective fishery using large mesh gillnets March 6, March 20, June 14-15 and with tangle nets on March 22 which resulted in a total of 2,950 adipose fin-clipped Chinook harvested in mainstem fisheries and 6,500 Chinook in Select Area Fisheries (SAFE). SAFE harvest includes fin-clipped and non fin-clipped Chinook.

Recreational

The 2007 mainstem recreational fishery operated under selective fishery regulations. Over 83,000 angler trips resulted in 6,800 fin-clipped Chinook being landed. The fishery below Bonneville Dam opened January 1 - April 15 and May 16 – June 15

Treaty Indian

Three spring Chinook were harvested in the commercial winter season surgeon gillnet fishery. The Treaty Indian fishery caught 6,020 spring Chinook for ceremonial and subsistence purposes in spring season fisheries. No spring commercial seasons were adopted in 2007.

Summer Fisheries

Non-Indian Commercial

A summer season fishery occurred during 10 hr fishing periods on June 25and July 2. A total of 1,100 Chinook were harvested. The fishery was non-selective for fin-clipped Chinook.

Recreational

The summer season below Bonneville Dam began June 16 and concluded June 30. The area from Bonneville Dam to Priest Rapids Dam was open from June 16 through July 3. An estimated 24,000 angler trips resulted in the harvest of 2,600 Chinook.

Treaty Indian

The Treaty Indian summer season fisheries harvested 5,375 Chinook including commercial, ceremonial and subsistence catches.

Fall Fisheries

Non-Indian Commercial

Early fall mainstem fisheries consisted of four Chinook salmon openings during the month of August. Total catch was 4,000 Chinook.

Late fall mainstem fisheries occurred during 24 openings from September 19 and completed on October 31 and included coho and Chinook target seasons. Open areas included most or all of Zones 1-5 with certain closed areas adopted to protect ESA listed Chinook, coho, and chum. Preliminary estimates of landings for the late fall season of the non-Indian commercial fishery were 30,200 coho and 8,150 Chinook. SAFE fisheries harvested 4,500 Chinook. The total non-Indian commercial harvest in the fall season including SAFE is 16,650 Chinook.

Recreational

The 2007 Buoy 10 fishery (from the mouth upstream to the Tongue Point/Rocky Point line) opened August 1 for Chinook, adipose fin-clipped coho, and adipose fin-clipped steelhead. For the season a total of 35,700 angler trips resulted in 4,200 Chinook and 8,300 coho being retained.

The mainstem Columbia River (from the Tongue Point/Rocky Point line upstream to H 39.5 Bridge at Pasco) opened for fall Chinook and coho on August 1. Non-adipose fin-clipped coho were released downstream from Hood River Bridge. In the lower Columbia River (downstream of Bonneville Dam) 80,700 angler trips resulted in 8,300 Chinook landed. The fishery closed September 16 and reopened September 29 and will remain open through December. Total fall Chinook harvest in all mainstem and tributary recreational fisheries is estimated to be 28,500 fish.

Treaty Indian

The Treaty Indian fall subsistence fishery began August 1 and runs through the end of the year. The treaty Indian fall commercial fishery consisted of seven weekly fishing periods from August 22 to October 6. Preliminary catch data indicate 30,769 fall Chinook were harvested, including commercial, ceremonial and subsistence catches.

Puget Sound Fisheries

Puget Sound marine fisheries of interest to the Pacific Salmon Commission in 2007 were regulated to meet conservation and allocation objectives for Chinook, coho, chum and sockeye salmon stocks, per Tribal-State agreement. For Puget Sound Chinook listed under the ESA, fisheries were managed according to the State and Tribal joint resource management plan, the Puget Sound Chinook Harvest Management Plan. This management plan defines limits to total exploitation rates for natural stocks and was determined by the National Marine Fisheries Service to be consistent with requirements specified under the ESA 4(d) Rule.

Release requirements were applied to many recreational and commercial fisheries for Chinook, coho and chum salmon, the latter to protect ESA-listed Hood Canal and Strait of Juan de Fuca summer chum.

Puget Sound fisheries were constrained by the need to meet management objectives for ESA listed Puget Sound Chinook, including the Puyallup River and Stillaguamish River management units. For the 2007 season, as with seasons since 2003, the low status of the Interior Fraser coho management unit represented the primary coho stock of concern with an exploitation rate cap of 10% for the southern U.S. fisheries.

Strait of Juan de Fuca Recreational

Recreational fishing regulations allowed retention of Chinook or coho with no adipose fin/ healed clips of the adipose fin beginning July 1 in the Strait of Juan de Fuca (Areas 5 & 6). Regulations in Area 5 were changed to allow for retention of adipose-intact coho during September 16-30. The Chinook selective fishery was regulated by a catch quota of 4,000 landed Chinook, or a maximum season length of 62 days. Additional sub-areas were also closed, as with fisheries in 2003 to 2006, with the intention of providing additional protection of local Chinook stocks. The Chinook selective fishery was closed August 5 and reopened for one day, August 9 for a total season of 36 days. The fishery continued through September 30 with Chinook non-retention. Areas 5 and 6 were also open to Chinook retention (non-selective) from February 16 through April 10, Area 5 from November 1 through November 30, and Area 6 from October 1 through October 30 with a 2 fish daily limit, 1 Chinook.

Recreational catch for the creel survey period totaled 4,100 Chinook (July 1-August 9) and 14,900 coho (Area 5; July 1-September 15; Area 6 July 1-August 9).. Catch record card estimates for salmon taken at times other than noted above are not yet available.

Strait of Juan de Fuca Net

Preliminary estimates of the 2007 catch in Strait of Juan de Fuca Tribal net fisheries are 23Chinook and 1,401coho salmon. These Chinook and coho catches were less than the preseason expectations of 800 Chinook and 3,900 coho.

Strait of Juan de Fuca Treaty Troll (Area 4B, 5, and 6C)

The preliminary estimates of the 2007 Strait of Juan de Fuca Treaty troll fishery are 2,999 Chinook and 291 coho . The Tribal catch estimates from this area do not include catches from Area 4B during the May-September PFMC management period, which have been included in the North of Cape Falcon troll summary.

San Juan Islands Net (Area 6, 7 and 7A)

Due to the low abundance of Fraser River sockeye, there was no commercial sockeye net fishery in the San Juan Islands in 2007. Preliminary estimates of the 2007 catch in San Juan Island net fishery directed at pink or chum salmon totaled 0 Chinook and 292 coho salmon for the non-Indian fishery, compared with pre-season expected landings of 1,997Chinook and 696 coho. Tribal fishery landings from this area totaled 2,593 Chinook and 1,800 coho compared with pre-season expected landings of 4,701Chinook and 8,141coho.

San Juan Islands Recreational

The southern and southeastern (Rosario Strait) portions of this catch area were again closed in 2007 to protect migrating, mature Puget Sound Chinook salmon. The remaining area was opened for retention of Chinook and coho salmon from July 1 to September 30. Release of unmarked coho salmon was required for the months of August and September. The month of October was opened for Chinook. Chinook retention also was allowed in the entire area from February 1 - March 31; Chinook retention was not allowed at other times Additional sub area closures are described in the Washington State Sport Fishing Rules Pamphlet. Catch estimates for this area are not available at this time.

Inside Puget Sound (Areas 8-13) Recreational

Catch and angler effort estimates are available for mark-selective recreational fisheries directed at hatchery Chinook in Areas 8.1 & 8.2 during the period October – April, and summer period fisheries conducted in Areas 9, 10, 11 and 13. Detailed reports of the conduct of these fisheries, including catch, effort and results of sampling and monitoring programs, are available from the Washington Department of Fish and Wildlife. Catch and effort estimates for other recreational fisheries are not available at this time.

Puget Sound Marine Net (Areas 8-13)

To achieve conservation objectives for Puget Sound Chinook and coho, very limited commercial fishing opportunities directed at abundant returns of hatchery Chinook and both hatchery and natural returns of coho were planned for 2007. Area catch totals for 2007 were 61,400 Chinook and 109,900 coho compared to pre-season estimates of 57,400 Chinook and 145,600 coho.

Puget Sound Terminal Fisheries

Tribal net and sport fisheries directed at salmon in this region were implemented based upon pre-season, Tribal-State agreements and subject to in-season adjustment. The Puget Sound rivers net harvest (all by Tribal fisheries) includes catch from river systems

in the Strait of Juan de Fuca, Hood Canal, and Puget Sound. The 2007 Tribal commercial net fisheries in Puget Sound rivers have harvested an estimated 45,700 Chinook and 59,400 coho. Estimates of 2007 recreational fishery harvest are unavailable at this time.

Table 24. Preliminary 2007 landed CHINOOK catches for Washington and Oregon fisheries of interest to the Pacific Salmon Commission (nearest 100)

Fisheries	2007 Preseason Total Mort.	2007 Preseason Landed 2/	2007 Preliminary Post-season	2006	2005	2004	2003	2002	2001	2000	1999	1998
Ocean Fisheries												
Troll (see text for quota information)												
Cape Flat.&Quill.(Areas 3/4/4B) 3/	44,800	40,100	28,300(1)	41,900	57,500	73,400	72,400	61,400	35,700	16,200	40,500	20,300
Col R & Grays Harbor (A 1&2)	16,500	11,200	10,400(1)	15,400	19,600	11,700	19,000	32,300	14,300	1,700	4,400	300
Sport (see text for quota information)												
Neah Bay (Area 4) 4/	2,000	1,700	1,500	1,400	2,800	5,500	4,700	5,200	1,500	400		100
La Push (Area 3)	1,000	900	600	1,700	1,700	1,800	1,900	2,000	600	200	1,000	100
Grays Harbor/Westport (Area 2)	10,700	9,400	5,200	5,800	22,400	11,300	21,800	42,600	15,700	6,300	6,600	1,700
Col. R./Ilwaco (Area 1)	4,800	4,300	2,200	2,300	9,600	6,200	5,800	8,000	5,100	1,500	2,300	300
Inside Fisheries												
Sport												
Juan de Fuca (Area 5&6) 5/	7,800	4,000	4,100	3,700	2,200	5,000(1)	5,100(1)	3,000(1)	4,100	1,600	1,400	2,200
San Juan Islands (Area 7)	5,000	2,700	Na	3,300(1)	2,100(1)	2,300(1)	3,300(1)	3,800(1)	6,600	3,400	2,700	3,100
Puget Sound Sport (Areas 8-13)	54,200	31,000	Na	20,900(1)	17,000(1)	19,900(1)	22,600(1)	19,000(1)	40,000	17,800	21,800	16,500
Puget Sound Rivers	13,800	13,500	Na	17,200(1)	12,900(1)	6,600(1)	11,400(1)	14,000(1)	12,500	5,900	8,600	9,500
North WA Coastal Rivers	na	na	Na	4001)	400(1)	800(1)	800(1)	800(1)	1,000	700	0	0
Grays Harbor (Areas 2A-2D)	na	na	Na	400(1)	400(1)	6,300(1)	1,300(1)	3,600(1)	3,800	2,300	100	1,700
Col River Sport 6/ - Spring	na	na	6,800	7,000	11,400	23,900	17,400	20,700	25,800	300	0	100
Col R&Trib Sport / - Summer/Fall	na	na	31,100	36,400	53,200	57,400	67,800	64,000	34,400	18,600	30,500	4,900
Commercial												
North WA Coastal Rivers	na	na	1,243	13,900	11,700	14,000	9,900	12,400	8,700	5,300	8,300	9,400
Grays Harbor (Areas 2A-2D) 7/	na	na	2,800	3,700	2,600	3,600	900	1,500	6,100	4,700	2,000	4,400
Columbia River Net-Winter/Spring	na	na	9,500	11,600	7,800	32,100	20,100	50,200	58,400	8,400	2,000	2,300
Columbia River Net –Summer/Fall	na	na	53,000	136,000	157,200	189,500	193,000	176,100	139,000	65,600	84,800	46,800
Juan de Fuca(4B5/6C) Net&Troll	11,100	9,700	3,000	1,900	5,500	21,200	1,200	2,800	2,500	800	1,100	600
San Juan Islands (Areas 6, 7 & 7A)	6,800	6,700	2,600	4,400	4,400	5,100	4,800	1,900	1,000	1,000	0	3,800
Puget Sd Marine (Areas 8 – 13)	58,100	57,400	61,400	68,500	57,800	40,900	59,400	73,500	89,300	66,100	67,700	41,300
Puget Sound Rivers	33,900	33,900	45,700	36,200	20,200	28,400	27,500	35,100	34,100	12,900	24,100	12,400

1/ Preliminary data. Estimates represent landed catch only and do not include non-retention mortality. 2007 estimates include catches from January 1 through November 15.

2/ This column shows the 2007 Chinook troll quotas (Non-Treaty troll quota 16,250 and Treaty troll quota of 35,000) as distributed by ocean area; Recreational Chinook quota 16,250 is also shown as distributed by area specific guidelines.

3/ Includes Area 4B catch during the PFMC management period (May 1 - September 30); Area 4B Treaty troll catch outside PFMC period included under Strait De Fuca

4/ Includes Area 4B catch

5/ 2005-2007 catches represent summer-only, since CRC annual estimates are not yet available.

6/ Mainstem only..

7/ Includes catch from the upper Chehalis (River+2A+2D) and Humptulips (River+2C).

8/ Catch estimates from creel. 2007 catches for July1-Sep30 Area 5, July 1- Aug 21 Area 6; since CRC annual estimates not yet available.

Table 25. Preliminary 2007 landed COHO catches for Washington and Oregon fisheries of interest to the Pacific Salmon Commission

Fisheries	2007 Preseason Total Mortality	2007 Pre-season Landed /2	2007 Preliminary Postseason	2006	2005	2004	2003	2002	2001	2000	1999	1998
Cape Flattery & Quillayute (Areas 3/4) 3/	49,700	44,200	41,500	32,500	24,100	62,700	11,800	17,900	58,800	21,800	33,800	8,100
Columbia R & Grays Harbor (Area 2)	21,800	16,200	16,800	1,800	1,700	7,900	4,700	200	7,400	5,900	700	100
Ocean Fisheries												
Troll (see text for quota information)												
Neah Bay (Area 4) 3/	15,300	12,200	10,900	5,800	10,200	29,400	19,700	8,400	17,900	11,600	5,400	8,100
LaPush (Area 3)	3,900	3,100	2,800	1,900	2,300	3,200	3,400	1,700	3,300	1,900	2,600	600
Grays Harbor (Area 2)	51,600	43,500	22,900	8,800	10,500	29,300	39,300	19,100	69,400	28,800	12,600	7,700
Col. R. (Leadbetter Pt. to Cape Falcon)	67,800	58,800	65,700	24,900	28,700	51,000	76,700	45,000	77,500	25,800	19,600	4,400
Inside Fisheries												
Sport												
Juan de Fuca (Areas 5 & 6) 4/	29,000	12,900	14,900	12,600(1)	30,700(1)	47,300(1)	50,800(1)	39,800(1)	71,200	32,400	8,700	28,900
San Juan Islands (7)	3,400	3,000	na	100 (1)	1,000 (1)	1,500(1)	2,000(1)	3,300(1)	4,900	2,600	500	2,500
Puget Sound Sport (Areas 8-13 all year)	56,600	53,300	na	17,000 (1)	26,400 (1)	39,300(1)	48,700(1)	29,800(1)	246,600	94,400	37,400	52,700
Puget Sound Rivers	38,900	37,000	na	13,500(1)	33,700(1)	35,800(1)	51,100(1)	37,600(1)	69,700	21,900	11,400	17,600
North WA Coastal Rivers	4,300	4,100	na	700(1)	1,500(1)	1,600(1)	1,100(1)	1,500(1)	2,000	900	0	0
Grays Harbor (Areas 2A-2D)	8,000	7,600	na	1,400(1)	3,300(1)	10,400(1)	12,600(1)	15,400(1)	21,700	6,900	900	1,200
Columbia River Buoy 10	14,100	12,000	8,300	3,700	6,900	15,100	54,400	6,200	132,000	21,500	8,900	3,200
Commercial												
North WA Coastal Rivers	41,600	40,800	1,182	30,800	87,200	46,800	49,600	71,800	69,300	30,100	45,500	20,000
Grays Harbor (Areas 2A-2D) 5/	31,800	31,200	9,700	9,600	25,700	22,500	18,300	21,100	18,800	16,700	14,600	14,500
Juan de Fuca (Areas 4B5/6C) Net&Troll	4,900	4,800	1,700	2,700	8,100	8,100	2,800	6,900	5,300	2,500	1,400	1,900
San Juan islands (Areas 6, 7 & 7A)	10,500	8,800	1,800	800	22,900	22,900	9,000	3,700	700	1,600	0	2,000
Puget Sound Marine (Areas 8 - 13)	148,600	145,600	109,900	142,700	319,200	319,200	134,700	171,300	244,600	272,600	78,500	120,400
Puget Sound Rivers	45,500	44,600	59,400	118,900	211,800	211,800	108,300	121,600	136,200	131,800	28,000	32,000

1/ Preliminary data. Estimates represent landed catch only and do not include non-retention mortality. 2007 estimates include catches from January 1 through November 15.

2/ This column shows the 2007 coho troll quotas (Non-Treaty troll marked coho quota 6,800 and Treaty troll quota of 37,500) as distributed by ocean area. Recreational marked coho quotas are as shown.

3/ Excludes Area 4B catch outside the PFMC management period (Oct 1 - Apr 30).

4/ 2004 - 2007 catches represent summer-only selective fisheries, since CRC annual estimates are not yet available. 2007 preseason estimate is for July-September period only and the preliminary postseason estimate is for Area 5 only.

5/ Includes catch from the upper Chehalis and Humptulips Rivers.

Preliminary Review of 2007 Washington Chum Fisheries of Interest to the Pacific Salmon Commission

This summary report provides a preliminary review of the 2007 chum fishing season and is subject to correction and revision as additional information becomes available. Washington chum fisheries in a number of areas, particularly in Washington Areas 7 and 7A, are still underway and some fish ticket data from recent weeks may not yet be in the catch reporting system as yet. The harvest and abundance information provided are based on preliminary data reported through November 19. This summary report addresses in detail only those fisheries of concern under the Annex IV, Chapter 6 of the Pacific Salmon Treaty. This includes mixed-stock fisheries in United States (U.S.) waters of the western Strait of Juan de Fuca (Areas 4B, 5 and 6C), the San Juan Islands (Area 7) and the Point Roberts area (Area 7A). Other chum fisheries in Washington waters are primarily terminal area fisheries targeting local terminal origin stocks.

Mixed Stock Fisheries

Areas 4B, 5, 6C

As in previous years, the chum fishery in Areas 4B, 5 and 6C was restricted to Treaty Indian gill net gear only. The fall chum fishery opened the week of October 7, with a five days per week schedule. At the end of the first week, the fishery schedule expanded to seven days per week in order to provide further opportunity to the few participants and concluded on November 10.

Incidental catches of chum salmon were very limited in 2007, primarily because of the lack of openings during the sockeye management period. Only 40 (summer) chum were recorded through September 15. During the subsequent fishery, directed at coho salmon, an additional 366 chum salmon were caught. During the fall chum fishery, 6,107 chum were harvested after October 7, resulting in an area catch total of 6,513 (Table 26).

Areas 7 and 7A

Chum fisheries in Areas 7 and 7A were conducted under the provisions of the recently adopted Chapter 6 of Annex IV of the Pacific Salmon Treaty. More specifically, this chapter calls for a flat exploitation rate limit on chum fisheries in Johnstone Strait, and specifies a fixed harvest level in U.S. Areas 7 and 7A, unless a critically low level of abundance is identified for the runs returning through Johnstone Strait. The base harvest ceiling for the Areas 7 and 7A fishery, in 2007 was 130,000 chum plus 46,000 chum from the accumulated historical difference, plus 15,000 chum from a 2006 shortfall below the base catch level, for a total target catch of 191,000 chum. Canada did not provide a preseason forecast nor provide an in-season update of chum abundance, but indicated in-season, on the basis of Inside area catches, that the Inside area run size was not at a critical level. The modified Chapter 6 of the Annex also specifies that chum fisheries in Areas 7 and 7A would not be initiated prior to October 10 and that, if the Fraser River chum run is updated in-season to levels lower than 900,000 fish, the U.S. would take actions to restrict fishery impacts on Fraser chum. The in-season Fraser chum run size estimate was 988,000, so this provision was not activated in 2007.

Non-Treaty reef net fisheries targeting marked coho salmon were conducted from the end of Fraser Panel control until October 9, and remained open targeting chum salmon from October 10 through November 17. Chum salmon by-catch in this fishery, prior to October 10, was 563 fish.

The Treaty Indian gillnet and purse seine fishery opened at the start of the fall chum management period for one day of fishing on October 10, followed by another day of fishing on October 13. The Non-Treaty fleet opened for two days of combined gillnet and purse seine fishing on October 11 and 12.

In the week beginning October 14, the Treaty Indian fishery was open for three days (October 14 – 16) and Non-Treaty fishery was open for the following three days (October 17 – 19). Beginning October 20, the Treaty Indian fishery was open continuously, until November 17. The Non-Treaty fishery was open continuously from October 22 through November 17.

Catches per vessel were very low through the first weeks of the fishery, slowly decreasing thereafter. Effort remained relatively low throughout the fishery primarily because of the availability of fishing opportunities in other Puget Sound areas, as well as because of periods of inclement weather. In the last three weeks of November there was very little catch and effort. Chum prices have improved over the past several years, but this fishery did not meet the base catch ceiling in 2007.

There were no summer chum reported caught in areas 7 and 7A prior to September 16. The total chum catch by all gears in areas 7 and 7A reported through November 19 was 26,902. It should be noted that these catch reports are likely still incomplete (Table 27).

During the fall chum fisheries in Areas 7 and 7A, there was a reported bycatch of 1058 coho salmon and no steelhead catch was reported. The reported bycatch during the chum fishery in Areas 4B, 5, 6C consisted of 14 steelhead during this period.

Chum and coho tissue samples were collected for genetic analysis from this fishery in 2007.

Puget Sound Terminal Area Fisheries and Run Strength

Preseason forecasts for chum returns to Puget Sound were for a moderate fall chum run totaling approximately 1.4 million fish. Most Puget Sound chum runs have been updated in-season indicating overall returns that are significantly higher than forecasted pre-season. Current in-season estimates indicate that the actual return to some areas of Puget Sound may be approximately 60% higher than forecast. Some Puget Sound chum fisheries are still underway, and additional in-season estimates of abundance may occur. At this time, spawning escapement estimates are not available.

Table 26. Preliminary 2007 Chum Harvest Report for Washington Reporting Areas 4B, 5, 6C

Areas 4B,5,6C	
Treaty Indian GN only	
Time Periods	GN
Through 9/15	40
9/16 - 10/7	366
10/8 - 10/14	908
10/15 - 10/21	1,903
10/22 - 10/28	1,779
10/29 - 11/4	640
11/5 - 11/11	877
Total	6,513

Table 27. Preliminary 2007 Chum Harvest Report for Washington Reporting Areas 7, 7a

Time Periods	Area 7				Area 7A			Area 7,7A
	PS	GN	RN	Area total	PS	GN	Area total	Total
Through 9/15	0	0	0	0	0	0	0	0
9/16 - 10/9	0	0	563	563	0	0	0	563
10/10 - 10/13	1,119	277	44	1,440	1,990	851	2,841	4,281
10/14 - 10/20	2,114	1,797		3,911	238	723	961	4,872
10/21 - 10/27	9,656	603		10,259	59	3,327	3,386	13,645
10/28 - 11/3	0	348		348	30	1,564	1,594	1,942
11/4 - 11/10	34	519		553		557	557	1,110
11/11 -11/17	0	462		462		27	27	489
Total	12,923	4,006	607	17,536	2,317	7,049	9,366	26,902
10/10 - 11/19 Period Bycatch	Coho: 1058; Steelhead: 0							

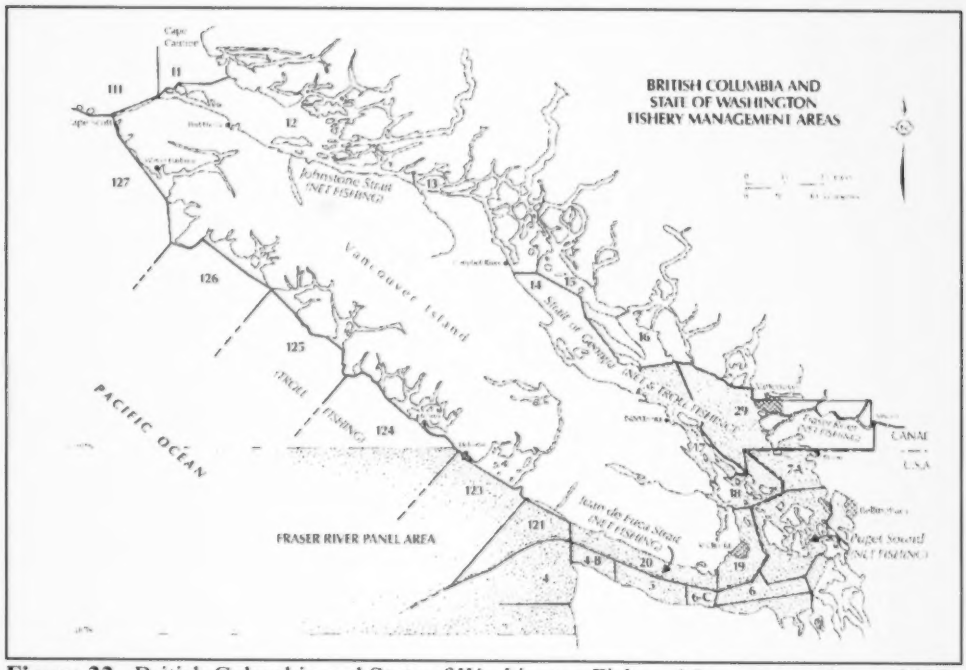

Figure 33. British Columbia and State of Washington Fishery Management Areas, 2007. The shaded area in the map represents the marine waters managed by the Fraser River Panel.

Pre-season Expectations and Plans

Forecasts and Escapement Goals

The Department of Fisheries and Ocean, Canada (DFO) provided the Panel pre-season run size forecasts and escapement goals by stock group (run) at various probability levels. Table 28 shows the 2007 pre-season sockeye forecasts at the 50 percent probability level, which represents the mid-point of the range of possible run sizes. These are the forecasts agreed upon by the Panel for use in pre-season fishery planning. Table 28 also provides the escapement goals for timing groups based on the pre-season forecasted abundance. The escapement goals for all timing groups can change in-season as the run size estimates change.

Fraser River pink salmon returns were projected pre-season at 19,570,000 fish, however, fisheries directed at Fraser River pink salmon were expected to be limited based on late-run sockeye expectations, and it was anticipated that much of the available pink salmon Total Allowable Catch (TAC) would not be harvested.

Table 28. 2007 Pre-season Fraser River sockeye Forecasts and Escapement Goals, by Stock Group.

	Early Stuart	Early Summer	Summer	Late	Total
Forecast of Abundance	45,000	690,000	3,369,000	2,143,000	12,548,000
Escapement Goal	44,500	276,000	1,348,000	857,200	2,525,700

Diversion

Diversion is defined as the percentage of Fraser sockeye or pink salmon migrating through Johnstone Strait (rather than the Strait of Juan de Fuca) in their approach to the Fraser River. Diversion through Johnstone Strait was forecasted pre-season to be 30% for sockeye. Diversion was modeled on a daily basis starting at 0% (100% migration through the Strait of Juan de Fuca) in late June and climbing to 59% in steady increments by early August.

Management Adjustment (MA) and Environmental Conditions

Management Adjustments reflect the expected difference between escapement estimates at Mission (minus catch above Mission) and actual spawning escapements. If the adjustments are adopted by the Panel, they are added to the gross escapement goal, effectively increasing the goal for an impacted run. For 2007, the Management Adjustment was modeled using discharge and temperature predictor variables and relationships between differences between estimates and run timing. Table 29 provides the pre-season projected MA's that were used for planning fisheries. In-season management adjustments use MA models that are based on both measured and forecasted temperatures and discharges, and in-season estimates of run timing.

Table 29. 2007 Pre-Season Management Adjustments

Early Summer		**Summer**		**Lates**	
Difference Between Estimates	**Management Adjustment**	**Difference Between Estimates**	**Management Adjustment**	**Difference Between Estimates**	**Management Adjustment**
27%	89,000	0%	0	43%	453,000

Run Timing

Run timing is temporal information about the presence of a salmon stock in a specific area during the time the stock is migrating through that area. Run timing is an important variable when planning fisheries and predicting run size in-season. The following Area 20 50% dates (the dates when 50% of the stock or run group is forecasted to have passed through Area 20) were predicted pre-season for the major Fraser sockeye run groups.

Table 30. 2007 Area 20 Pre-Season 50% Run Timing Dates

Run Group	Area 20 50% Run Timing Date
Early Stuart	July 1
Early Summers	July 31
Summers	August 9
Birkenhead	August 15
True Lates	August 16

U.S. Total Allowable Catch (TAC)

Pre-season, the U.S. TAC was established at 448,000 sockeye. Pink salmon allowable catches were not a significant consideration in pre-season planning due to limited sockeye availability. Pink salmon fisheries conducted after the sockeye clear the fishing areas were not expected to be able to harvest the total pink salmon TAC.

Pre-Season Management Plans

During the preseason planning process the Fraser Panel evaluates and adopts management approaches for Fraser sockeye and pink salmon that address conservation, and harvest objectives for each major stock group. The Fraser River Panel develops fishing plans and in-season decision rules with the objective to meet management goals. Managing Fraser River sockeye and pink salmon involves a trade-off between catching abundant stocks and meeting escapement objectives for less abundant stock groups.

In 2007 the Panel adopted a management plan that recognized that fishing opportunities would be constrained by Early Summer runs at the beginning of the season and Late-Run stocks later in the season. There was no TAC predicted to be available for Early Stuart sockeye in 2007, and commercial fisheries were not contemplated on this timing group.

The early entry behavior of late run sockeye, observed in recent years, which results in an apparent high loss of fish prior to reaching the spawning grounds, was expected to continue in 2007. A significant management adjustment was planned for pre-season to account for this anticipated loss of Late run fish.

The Panel developed a pre-season fishing plan that balanced the competing objectives of maximizing the Summer run catch (which made up a large portion of the TAC, and had the highest allowable exploitation rate) and meeting the gross escapement goals for Early Summer runs and Late-runs. For the major U.S. fisheries this meant that sockeye openings would likely be constrained to the first three weeks of August, and an approximate pre-season fishing schedule was developed for that window of opportunity. The total number of

days of fishing in U.S. waters was expected to be relatively small given the expected low diversion rate. Pink salmon directed fisheries were not anticipated until mid-September after the Late-run sockeye had mostly cleared the fishing areas, unless sufficient sockeye TAC remained to allow fisheries to begin earlier.

In-Season Management

In-season, the Pacific Salmon Commission staff analyzes a variety of information to produce best estimates of diversion, management adjustments, run-timing, abundance, and harvest by stock group. These estimates are created using stock ID information, test fishing data, counts of escapements past Mission, harvest data and environmental information.

Run Assessment

The final in-season abundance estimates for 2007 (Table 31) indicate that all stock groups came back much lower than pre-season expectations. None of the sockeye stock groups returned at more than 30% of the preseason expectations.

These very poor returns relative to expectations is indicative of unusually poor marine survival affecting all stocks. This poor marine survival was observed in other, non-Fraser stocks, as well. Given these poor returns there was no TAC of any stock group available for commercial harvest.

Pink salmon returns were similarly lower than expected, with an in-season estimated run size of 11,000,000, relative to a preseason expectation of 19,570,000 (only 56% of expected). However, the pink salmon in-season abundance estimate still afforded a significant TAC, and some U.S. fishing opportunity late in the season.

Run timing was not greatly different than predicted preseason, although the Early Summer runs were later than expected and the Summer and Late runs were earlier than expected creating greater overlap between these stock groupings.

Table 31. Comparison of pre-season vs. in-season abundance estimates for Fraser River Sockeye Salmon by Stock Group (run).

Stock Group	Pre-Season 50% Probability Forecast	In-Season Run Size Estimate	Comparison: In-Season vs. 0Pre-Season Forecast
Early Stuart	45,000	13,000	29%
Early Summer	690,000	155,000	22%
Summer	3,369,000	650,000	19%
Late	2,143,000	610,000	28%
Total	6,247,000	1,428,000	23%

Table 32. 2007 Preliminary 50% Run Timing Date in Area 20

Run Group	Pre-season 50% Run Timing Date	In-season 50% Run Timing Date
Early Stuart	July 1	July 1
Early Summers	July 31	August 4
Summers	August 9	August 6
Lates	August 16	August 12

Season Description

Prior to August 23
Throughout the summer the in-season assessments of abundance consistently indicated abundances well below levels at which the U.S. would have any available sockeye share to harvest. No commercial sockeye fisheries were opened in U.S. waters in 2007.

Week ending August 25
Given an apparent abundance of pink salmon migrating through the Strait of Juan de Fuca and the very low abundance of sockeye, based on test fishing results, the Panel decided to open Treaty Indian fisheries in Areas 4B/5/6C and Non-Indian reef net fisheries in Areas 7/7A, beginning on August 23rd. Reef nets were required to release all sockeye. The diversion rate for pinks was estimated at about 50%.

Week ending September 1
Based on the continued clearance of sockeye from all U.S. fishing areas and pink salmon abundance appearing to be about as predicted, the Panel extended Treaty Indian pink fishing in Areas 4B/5/6C throughout the week, and opened Treaty Indian fisheries in Areas 6/7/7A for 5 days on August 26, 27, 30, 31, and September 1. Non-Indian fisheries were opened in Areas 7/7A for reef nets for 4 days on August 26, 28, 29, and September 1, and for gillnet and purse seine gear for 3 days on August 28, 29, and September 1. A portion of Area 7A near Point Roberts (the Apex) remained closed to fisheries throughout these openings (somewhat larger area closed for Non-Indian fisheries) to protect any sockeye that may be holding in this area prior to moving into the Fraser River. All Non-Indian fisheries were required to release sockeye.

Week ending September 8
Pink abundance was now beginning to appear less than the preseason projection and the Panel decided to lower the run size estimate to 10 million. However, this run size still supported a substantial TAC for U.S. fisheries. The pink diversion rate was estimated at 37% at the beginning of the week but had increased substantially to 50% or greater by the end of the week. Treaty Indian fisheries in Areas 4B/5/6C continued throughout the week. Based on declining pink salmon abundance entering through the Strait of Juan de Fuca, the panel decided to relinquish control of Areas 4B/5/6C effective at the end of the week (September 8). In Areas 6/7/7A the Treaty Indian fisheries were also open for the entire week. Non-Indian fisheries in Areas 7/7A were open for reef nets the entire week, and Non-Indian gillnet and purse seine gear for 5 days on September 2, 4, 5, 6, and 7. The Apex closures and the Non-Indian requirement to release sockeye remained in effect throughout this week's fisheries.

Week ending September 15
Pink salmon diversion rate now estimated at 79%. The pink run size estimate was increased slightly to 11 million. Treaty Indian fisheries in Areas 6/7/7A were open for 2 days on September 9 and 10. The Non-Indian reef net fishery was open for the entire

week. Non-Indian gillnet and purse seine gear was open for only one day this week on September 10. The Apex closures and the Non-Indian requirement to release sockeye remained in effect throughout this week's fisheries.

Week ending September 22
Based on declining catches of all species, Areas 6/7/7A remained closed for all gear except for reef nets. Non-Indian reef net gear was open in Areas 7/7A for 5 days this week from September 16 through September 20. The Panel decided to relinquish control of Areas 6/7/7A effective September 21.

Harvest

Between August 23 and September 20 the United States caught a total of 376,200 Fraser River pink salmon and only 3,900 Fraser River sockeye in Panel area waters (Tables 33 and 34)[3]. All of the sockeye landed were taken as ceremonial and subsistence harvest by the Treaty Indian fishery. During this time period the Treaty Indian fisheries in Areas 4B/5/6C were open for a total of 17 days and in Areas 6/7/7A for 14 days. The Non-Indian fishery in Areas 7/7A was open for 25 days for reef nets and 9 days for gillnet and purse seine gear. The diversion rate for pink salmon increased substantially near the end of the season and resulted in more openings than would have been projected preseason. Even with the extensive openings, the U.S. still fell far short of its total pink salmon TAC of 1,285,000 fish.

Table 33. Preliminary estimates of 2007 U.S. catches of Fraser River sockeye salmon in Panel area waters.

	Treaty Indian	Non-Indian
C and S	3,900	0
Catch Areas 4B/5/6C	0	0
Catch Areas 6/7/7A	0	0
Total	3,900	0

Table 34. Preliminary estimates of 2007 U.S. catches of Fraser River pink salmon in Panel area waters.

	Treaty Indian	Non-Indian
C and S	0	0
Catch Areas 4B/5/6C	0	0
Catch Areas 6/7/7A	216,600	159,600
Total	216,600	159,600
% of U.S. Catch	57.6%	42.4%

[3] Catch data reported by PSC staff as of 9/27/07.

D. 2007 UPDATE REPORTS FOR SALMONID ENHANCEMENT PROGRAMS IN THE UNITED STATES AND CANADA

The Pacific Salmon Treaty between Canada and the United States requires that information be exchanged annually regarding operation of and plans for existing enhancement projects, plans for new projects, and views concerning the other country's enhancement projects. In 1988, a committee was formed to develop recommendations for the pre- and post-season and enhancement report formats. In summary, the committee proposed that:

- detailed reports on existing enhancement facilities of the type produced in 1987 be prepared every four years;
- the Parties will annually update information on eggs taken, fry or smolt released and adults back to the facility; significant changes in facility mission or production will be highlighted in narratives; and
- the Parties will provide periodic reports through the appropriate panels on new enhancement plans.

1. 2004 ANNUAL REPORT ON THE SALMON ENHANCEMENT ACTIVITIES OF THE UNITED STATES

This report had not been received by March 31, 2008.

2. 2005 ANNUAL REPORT ON THE SALMONID ENHANCEMENT ACTIVITIES OF THE UNITED STATES

This report had not been received by March 31, 2008.

3. 2006 ANNUAL REPORT ON THE SALMONID ENHANCEMENT ACTIVITIES OF THE UNITED STATES

This report had not been received by March 31, 2008.

4. 2007 ANNUAL REPORT OF THE SALMONID ENHANCEMENT ACTIVITIES OF THE UNITED STATES

This report had not been received by March 31, 2008.

5. 2006 REPORT ON THE SALMONID ENHANCEMENT PROGRAM IN BRITISH COLUMBIA

This report had not been received by March 31, 2008.

6. 2007 REPORT ON THE SALMONID ENHANCEMENT PROGRAM IN BRITISH COLUMBIA

This report had not been received by March 31, 2008.

Reports of the Joint Technical Committees

PART V
REPORTS OF THE JOINT TECHNICAL COMMITTEES

Executive summaries of reports submitted to the Commission by the joint technical committees during the period April 1, 2006 to March 31, 2007 are presented in this section. Copies of the complete reports are available from the library of the Pacific Salmon Commission.

A. JOINT CHINOOK TECHNICAL COMMITTEE

2007 ANNUAL REPORT OF CATCHES AND ESCAPEMENTS, EXPLOITATION RATE ANALYSIS AND MODEL CALIBRATION
TCCHINOOK (08)-1 – February 2008.

The June 30, 1999, Pacific Salmon Treaty (PST) Annexes and Related Agreements (Agreement) substantially changed the objectives and structure of the Pacific Salmon Commission's (PSC) Chinook salmon fisheries and assessment of Chinook salmon stocks. The Agreement replaced the previous ceiling and pass-through fisheries with Aggregate Abundance Based Management (AABM) and Individual Stock Based Management (ISBM) fisheries. It also assigned the Chinook Technical Committee (CTC) with a number of tasks related to implementation of the Agreement (Appendix to Annex IV, Chapter 3).

In this report, we provide a summary of 2006 fishery catches by region, available estimates of incidental mortality by fishery and limited commentary on fishery catches where needed. Landed catch is reported in the appendices for each geographic area covered under the PST. An assessment of escapement for stocks with CTC accepted goals is included, and escapement data thru 2006 are provided for all escapement indicator stocks. This report also contains the principal results of the annual exploitation rate assessment of CWT data through 2005 and the final preseason Chinook model calibration for 2007 (CLB 0705). Results include the Abundance Indices (AIs) for the AABM fisheries and ISBM indices for each party (country).

AABM ABUNDANCE INDICES AND ASSOCIATED CATCHES

The pre- and postseason AIs for the three AABM fisheries, Southeast Alaska All Gear (SEAK), Northern British Columbia Troll and Queen Charlotte Islands Sport (NBC), and West Coast Vancouver Island Troll and Outside Sport (WCVI) are presented in Table 1. The Agreement specifies that the AABM fisheries are to be managed through the use of the AIs. Each calibration provides the first postseason AIs for the previous year and the preseason AIs for the current year. Preseason AIs are used to set total allowable catch limits in the upcoming fishing season. Subsequently, postseason AIs (from the following year's calibration) are used to track catch overage and underage provisions. The first 2006 postseason AIs and the 2007 preseason AIs have now been finalized.

Table 1. Abundance Indices for 1999 to 2007 for the SEAK, NBC, and WCVI AABM fisheries.

	SEAK		NBC		WCVI	
Year	Preseason	Postseason	Preseason	Postseason	Preseason	Postseason
1999	1.15	1.12	1.12	0.97	0.60	0.50
2000	1.14	1.10	1.00	0.95	0.54	0.47
2001	1.14	1.29	1.02	1.22	0.66	0.68
2002	1.74	1.82	1.45	1.63	0.95	0.92
2003	1.79	2.17	1.48	1.90	0.85	1.10
2004	1.88	2.06	1.67	1.83	0.90	0.98
2005	2.05	1.90	1.69	1.65	0.88	0.84
2006	1.69	1.73	1.53	1.50	0.75	0.68
2007	1.60		1.35		0.67	

In general, the AIs for 1999 through 2001 are low compared to AIs in the late 1980s and early 1990s but values increased substantially starting in 2002. The 2007 projected AI values have declined when compared to the high values for 2004 through 2006. The Agreement specifies an allowable catch for each AI for each fishery. The maximum allowable Treaty catch (total catch minus any hatchery add-on and exclusion catch) by fishery and year and the actual (observed) catches are shown in Table 2.

Table 2. Observed catches and postseason allowable catches for 1999 to 2006, and preseason allowable catches for 1999 to 2007, for AABM fisheries.

PST Treaty Allowable and Observed Catches									
Year	SEAK (T, N, S) [1]			NBC (T, S)			WCVI (T, S)		
	Pre-season Allowable Catch	Post-season Allowable Catch	Observed Catch	Pre-season Allowable Catch	Post-season Allowable Catch	Observed Catch	Pre-season Allowable Catch	Post-season Allowable Catch	Observed Catch
1999	192,800	184,200	198,842	145,600	126,100	86,726	128,300	107,000	36,413
2000	189,900	178,500	186,493	130,000	123,500	31,900	115,500	86,200	101,438
2001	189,900	250,300	186,919	132,600	158,900	43,500	141,200	145,500	117,670
2002	356,500	371,900	357,133	192,700	237,800	150,137	203,200	196,800	165,036
2003	366,100	439,600	380,152	197,100	277,200	191,657	181,800	268,900	175,821
2004	383,500	418,300	428,773 433,446 [2]	243,600	267,000	241,508	192,500	209,600	216,624
2005	416,400	387,400	391,507	246,600	240,700	243,606	188,200	179,700	202,662
2006	346,800	354,500	359,184	223,200	200,000	247,337	160,400	145,500	146,883
2007	329,400			178,000			143,300		

[1] Nomenclature is T for troll, N for net, and S for sport.

[2] The lower value resulted from subtracting a disputed terminal exclusion catch for the Stikine River in 2004. Catch accounting has since been defined in the Transboundary Agreement.

Table 3 shows the differences between the postseason allowable catches and the observed catches in AABM fisheries for 1999–2006, and the cumulative differential for those years. All
three AABM fisheries have cumulative underages. In SEAK, observed catches have been below final allowable catches for three of the eight years; the cumulative differential is –3.7% or -3.5%. In NBC, observed catches have been below the final allowable catches in six of the eight years; the cumulative differential is –24.2%. In WCVI, observed catches have been below allowable catches in four of the eight years; the cumulative differential is –13.0%.

Table 3. Deviations in numbers of Chinook salmon and percentages from catch targets derived from the first postseason AI (Table 3.2) for Pacific Salmon Treaty AABM fisheries in 1999 to 2006.

Year	SEAK		NBC		WCVI	
	Number of Fish	Percent Difference	Number of Fish	Percent Difference	Number of Fish	Percent Difference
1999	+14,642	+7.9%	-39,374	-31.2%	-70,587	-66.0%
2000	+7,993	+4.5%	-91,600	-74.2%	+15,238	+17.7%
2001	-63,381	-25.3%	-115,400	-72.6%	-27,830	-19.1%
2002	-14,767	-4.0%	-87,663	-36.9%	-31,764	-16.1%
2003	-59,448	-13.5%	-85,543	-30.9%	-93,079	-34.6%
2004	+10,473 +15,146	+2.5% +3.6%	-25,492	-9.5%	+7,024	+3.35%
2005	+4,107	-0.2%	+2,906	+1.2%	+22,962	+12.8%
2006	+4,684	-1.1%	+47,337	+23.7%	+1,383	+0.95%
Cum.	-95,697 -91,024[1]	-3.7% -3.5%	-398,848	-24.2%	-174,339	-13.0%

[1] The lower value resulted from subtracting a disputed terminal exclusion catch for the Stikine River in 2004. Catch accounting has since been defined in the Transboundary Agreement.

ISBM INDICES

For ISBM fisheries, the Agreement specified that Canada and the United States would reduce base period exploitation rates on specified stocks by 36.5% and 40%, equivalent to ISBM indices of 63.5% and 60% percent, respectively. This requirement is contained in Chapter 3 section 4(d) of the treaty and is referred to as the 'general obligation' and does not apply to stock groups that achieve their CTC agreed escapement goals. Estimated ISBM fishery indices are shown in Table 4 for Canadian fisheries and Table 5 for United States (U.S.) fisheries. Both tables present CWT-based indices for 2005, and Chinook model-based indices for 2007. The agreement specifies that the ISBM indices be forecasted preseason and evaluated postseason for each escapement indicator stock listed in Attachments I to V of the Chinook Chapter.

CWT-based Indices in 2005

Five of the six Canadian ISBM indices from the CWT-based estimates for 2005 show that exploitation rates were reduced more than required for all stocks or stock groups for which the indices could be calculated. The exception was the ISBM index for WCVI Falls, which was 0.986 in 2005. Four of the 16 U.S. ISBM indices for the Coded Wire Tag (CWT).S. CWT-based ISBM indices that exceeded 0.60, ten (Upriver based estimates for 2005 were reduced more than required. Of the 12 U Brights, Quillayute, Queets, Hoh, Lewis, Mid-Columbia Summers, Nehalem, Siletz, Siuslaw and Cowichan) have agreed escapement goals and all but the Cowichan stock exceeded their goals in 2005.

Table 4.Canadian 2005 ISBM indices based on CWT and the 2007 indices predicted from the PSC Chinook Model.

		Canadian ISBM Indices	
Stock Group	**Escapement Indicator Stock**	**CWT Indices for 2005**	**Model Indices for 2007**
Lower Strait of Georgia	Cowichan Nanaimo	0.132 [4] NA [1,5]	0.240 [6]
Fraser Late	Harrison River [2]	0.058 [7]	0.211
North Puget Sound Natural Springs	Nooksack Skagit	NA NA	0.563 0.563
Upper Strait of Georgia	Klinaklini, Kakweikan, Wakeman, Kingcome, Nimpkish	0.028	0.146
Fraser Early (spring and summers)	Upper Fraser, Mid Fraser, Thompson	NA	0.159
West Coast Vancouver Island Falls	WCVI (Artlish, Burman, Kauok, Tahsis, Tashish, Marble)	0.986 [8]	0.133
Puget Sound Natural Summer / Falls	Skagit Stillaguamish Snohomish Lake Washington Green River	NA 0.057 NA NA 0.085	0.718 0.821 0.736 0.735 [9] 0.752 [9]
North / Central B. C.	Yakoun, Nass, Skeena, Area 8	NA	0.202
Washington Coastal Fall Naturals [3]	Hoko, Grays Harbor, Queets [2], Hoh [2], Quillayute [2]	NA	0.194
Columbia River Falls [3]	Upriver Brights [2] Deschutes Lewis [2]	NA NA NA	0.129 0.129 0.030
Columbia R Summers [3]	Mid-Columbia Summers [2]	NA	0.119
Far North Migrating OR Coastal Falls [3]	Nehalem [2], Siletz [2], Siuslaw [2]	NA	0.078

[1] Not available (NA) because of insufficient data (lack of stock specific tag codes, base period CWT recoveries, etc).
[2] Stock or stock group with a CTC agreed escapement goal.
[3] Stock group listed in Annex 4, Chapter 3, Attachment V.
[4] An inconsistency was discovered between the approaches used to calculate the model-based and CWT-based indices. The former included harvest rates for terminal sport while the latter did not. Terminal sport harvest rates are now included in the calculation of both indices. Further review is yet required to determine whether the base period terminal sport harvest rates obtained from analyses of Big Qualicum CWT recoveries adequately represent impacts that would have occurred on Cowichan Chinook.
[5] Several problems have been identified in the approach previously used to calculate the CWT-based indices for Nanaimo Chinook. Until these problems are resolved, indices for this stock will not be reported.
[6] Although model-based indices were previously calculated separately for Cowichan and Nanaimo, these did not adequately represent impacts on either LGS stock because the model-based data represent an aggregate of the two stocks and methods do not currently exist to correctly disaggregate these data for calculation of the ISBM values. Until such methods are developed, a single index value only will be reported representing the aggregate.
[7] The terminal sport harvest rates for Chilliwack Hatchery Chinook, the indicator stock, were removed from the calculation for the Harrison River naturals because sport harvest has been essentially zero on the natural population.
[8] An inconsistency was discovered between the approaches to calculate the model- and CWT-based indices. The former included harvest rates for terminal sport, the latter did not. Terminal sport harvest rates are now included in both indices. A more extended review of the indices for WCVI Chinook will be carried out to determine whether they adequately represent impacts on the WCVI wild aggregate.
[9] For Canadian ISBM fisheries, the same distribution and Index value are used for Lake Washington and Green R.

Predicted ISBM Indices for 2007

Five of the 19 ISBM indices for Canada, based on outputs from calibration 0705, are predicted to be above the allowable value of 0.635 for Canadian ISBM fisheries in 2007 (Table 4). None of these stocks (Skagit, Stillaguamish, Snohomish, Lake Washington and Green River) have CTC agreed escapement goals. Nine of the 22 U.S. ISBM indices based on calibration 0705 are predicted to be above the allowable limit of 0.60 for U.S. ISBM fisheries in 2007 (Table 5). All nine have CTC agreed escapement goals: Queets, Hoh, Quillayute, Upriver Brights, Lewis, Mid-Columbia Summers, Nehalem, Siletz, and Siuslaw.

Table 5. U.S. 2005 ISBM indices based on CWT and the 2007 indices predicted from the PSC Chinook Model.

		U.S. ISBM Indices	
Stock Group	**Escapement Indicator Stock**	**CWT Indices for 2005**	**Model Indices for 2007**
Washington Coastal Fall Naturals	Hoko	NA [1]	0.401
	Grays Harbor	0.560	0.504
	Queets [2]	2.050	1.014
	Hoh [2]	1.030	1.111
	Quillayute [2]	1.030	0.883
Columbia River Falls	Upriver Brights [2]	1.780	0.726
	Deschutes	0.670	0.493
	Lewis [2]	0.980	1.466
Puget Sound Natural Summer / Falls	Skagit	NA	0.325
	Stillaguamish	0.220	0.152
	Snohomish	NA	0.138
	Lake Washington	NA	0.391
	Green R	0.170	0.278
Fraser Late	Harrison River [2]	0.240	0.563
Columbia R Summers	Mid-Columbia Summers [2]	6.080	0.943
Far North Migrating OR Coastal Falls	Nehalem [2]	2.000	2.183
	Siletz [2]	1.190	1.399
	Siuslaw [2]	1.630	1.241
North Puget Sound Natural Springs	Nooksack	NA	NA
	Skagit	NA	NA
Lower Strait of Georgia [3]	Cowichan,	10.230	0.288
	Nanaimo	10.230	0. 288
Upper Strait of Georgia [3]	Klinaklini, Kakweikan, Wakeman, Kingcome, Nimpkish	NA	NC [4]
Fraser Early (spring and summers) [3]	Upper Fraser, Mid Fraser, Thompson	NA	0.219
West Coast Vancouver Island Falls [3]	WCVI (Artlish, Burman, Kauok, Tahsis, Tashish, Marble)	NA	0.311
North / Central B. C. [3]	Yakoun, Nass, Skeena, Area 8	NA	NC

[1] Not available (NA) because of insufficient data (lack of stock specific tag codes, base period CWT recoveries, etc).
[2] Stock with a CTC agreed escapement goal.
[3] Stock group listed in Annex 4, Chapter 3, Attachment IV.
[4] NC means that the current model assumes the stock is not caught in U.S. ISBM fisheries.

ESCAPEMENTS THROUGH 2006

The escapements of 50 naturally spawning escapement indicator stocks/stock aggregates are reviewed annually. Biologically-based escapement goals have been accepted by the CTC for 24 of the 50 escapement indicator stocks/stock aggregates. For 12 of these, the agency escapement goal is defined as a range; for the remaining 12, the escapement goal is the point estimate of S_{MSY} (escapement producing maximum sustained yield). In 2006, escapements were within the goal range for seven stocks, above the range or S_{MSY} point estimate for 11 stocks, and below the goal for six stocks. Data for stocks without accepted goals are presented to illustrate trends in escapement. The CTC will continue to review escapement goals, as they are provided to the committee.

B. JOINT CHUM TECHNICAL COMMITTEE

2005 POST SEASON SUMMARY REPORT TCCHUM (07)-1 – June 2007.

This Joint Chum Salmon Technical Committee report presents the appropriate information on chum salmon stocks and fisheries in southern British Columbia and Washington for the years 2005 to address the specific provisions and requirements of Chapter 6 of Annex IV of the Pacific Salmon Treaty (PST) and the Commission's guidance concerning additional agreements between the parties.

The treaty between the governments of Canada and the United States of America (U.S.) concerning Pacific salmon was designed to facilitate co-operation between the two countries in the management, research and enhancement of Pacific salmon stocks. Chapter 6 of Annex IV (Chum Annex) of the Pacific Salmon Treaty (PST) required that certain fisheries for chum salmon in southern British Columbia (B.C.) and Washington be managed in a specified manner. Other fisheries, while not specifically mentioned in the PST, are known to harvest chum salmon originating in the other country. This report presents various aspects of the chum found in Washington State and in B.C. waters between Vancouver Island and the mainland and off the west coast of Vancouver Island, and discusses the management actions of Canada and the U.S. in relation to the PST requirements.

In 1999 a new Chum Annex was negotiated and adopted by the parties for a term of 10 years. Certain provisions of this Annex were updated, relative to earlier versions, to be consistent with the changes in the "Clockwork" management strategy implemented by Canada for fisheries in Johnstone Strait. It also included additional conservation provisions to address concerns of the United States for Hood Canal-Strait of Juan de Fuca summer chum salmon, which have been listed as a "threatened" species under the United States' Endangered Species Act.

In 2002, Canada implemented a significant change in Southern B.C. chum management replacing the "Clockwork" stepped exploitation rates in favor of a fixed fishing schedule designed to approximate a total harvest rate of 20%. The Parties managed their fisheries through 2005 within the spirit of the existing Annex and the Commission's guidance.

In 2004, the Parties were given additional Commission guidance that modified certain provisions of the Chum Annex. The purpose of the guidance document was to provide Commission direction to the Southern Panel on the conduct of southern chum salmon fisheries for the years 2004 to 2008. This direction was not intended to replace Annex IV, Chapter 6 of the Pacific Salmon Treaty but to address a change in Canadian

management, which suspended development of pre-season run size estimates of chum to Canadian waters. The guidance document outlines agreement on modifications to the limits for the U.S. chum salmon fishery in Areas 7 and 7A. This modification disconnects the harvest levels in the U.S. from catch volume in Canada. The U.S. fishery in Areas 7 and 7A was managed pursuant to the Commission guidance to the Southern Panel on the management of southern chum fisheries. The guidance further provided for an additional linkage of the U.S. fishery, in Area 7 and 7A, to the abundance of chum salmon returning to the Fraser River. Additionally, the guidance document provided for conditional exploitation rates for Canadian fisheries based on specific levels of abundance.

C. JOINT COHO TECHNICAL COMMITTEE

No reports were finalized for publication during this reporting period.

D. JOINT NORTHERN BOUNDARY TECHNICAL COMMITTEE

No reports were finalized for publication during this reporting period.

E. JOINT TRANSBOUNDARY TECHNICAL COMMITTEE

SALMON MANAGEMENT AND ENHANCEMENT PLANS FOR THE STIKINE, TAKU AND ALSEK RIVERS, 2006.
TCTR (07)-1. April 2007.

Management of transboundary river salmon to achieve conservation, allocation and enhancement objectives, as stipulated by the Pacific Salmon Treaty (PST), requires a co-operative approach by Canada and the United States. It is important that both Parties have a clear understanding of the objectives and agree upon procedures to be used in managing the fisheries, including the criteria upon which modifications of fishing patterns will be based. This document is intended to facilitate co-operative salmon management and research on transboundary stocks of the Stikine, Taku, and Alsek rivers conducted by the Canadian Department of Fisheries and Oceans (DFO), the Tahltan and Iskut First Nations (TIFN), the Taku River Tlingit First Nation (TRTFN), the Champagne & Aishihik First Nation (CAFN) and the Alaska Department of Fish and Game (ADF&G).

The report contains, by river system and species, the 2006 salmon run outlooks, spawning escapement goals, a summary of harvest sharing objectives, and an outline of management procedures to be used during the conduct of the 2006 fisheries. Numerical forecasts are presented for: Stikine sockeye and Chinook and Taku Chinook, which are required by the PST; Taku sockeye and coho; and Alsek sockeye and Chinook salmon. Outlooks for other stocks are given qualitatively with reference to brood year escapement data where available. The report also contains joint plans for fry plants and egg collections and a detailed list of proposed field projects for 2006, identifying agency responsibility and contacts for the various functions within the projects.

SUMMARY OF THE TRANSBOUNDARY GENETIC STOCK ID WORKSHOP: JANUARY 18-19, 2007.
TCTR (07)-2. April 2007

Various genetic stock ID (GSI) proposals have been submitted to the Northern Fund in previous years to examine the utility of using genetic stock ID to increase knowledge and

improve management of Transboundary and Boundary Area salmon stocks. Most proposals have been developed and submitted independently and it has become apparent that a more collaborative approach is required to avoid duplication and unnecessary competition for funding, and to promote the development of a common plan to guide the development of stock ID to benefit Canada and the U.S.

Northern Fund Project NF-2006-I-21 was developed in this context specifically to examine how genetic stock ID can be used to improve the management of Chinook and sockeye salmon stocks of the Transboundary rivers.

The objectives of this project are as follows:

1. to jointly develop a genetic stock ID program for use in the inseason abundance-based management of Transboundary Chinook and sockeye salmon;
2. to examine existing baselines for Chinook and sockeye to determine if additional sampling is required;
3. to determine if further standardization of baselines is required and if so, commence that standardization; and
4. to develop collaborative proposal(s) for Transboundary genetic stock ID project(s) in the next NF funding cycle.

To meet these objectives, a workshop was held by the Transboundary Rivers Technical Committee on January 18th and 19th, 2007 in the Pacific Salmon Commission board room in Vancouver to address the objectives identified in Northern Fund Project NF-2006-I-21. The agenda for the workshop included the following primary components:

1. Review of needs for genetic stock ID in management/stock assessment;
2. Review of databases;
3. Future approach; and
4. Northern Fund proposals 2007.

SALMON MANGEMENT AND ENHANCEMENT PLANS FOR THE STIKINE, TAKU AND ALSEK RIVERS 2007.
TCTR (07)-3. December 2007.

Management of transboundary river salmon to achieve conservation, allocation and enhancement objectives, as stipulated by the Pacific Salmon Treaty (PST), requires a co-operative approach by Canada and the United States. It is important that both Parties have a clear understanding of the objectives and agree upon procedures to be used in managing the fisheries, including the criteria upon which modifications of fishing patterns will be based. This document is intended to facilitate co-operative salmon management and research on transboundary stocks of the Stikine, Taku, and Alsek rivers conducted by the Canadian Department of Fisheries and Oceans (DFO), the Tahltan and Iskut First Nations (TIFN), the Taku River Tlingit First Nation (TRTFN), the Champagne & Aishihik First Nation (CAFN) and the Alaska Department of Fish and Game (ADF&G).

The report contains, by river system and species, the 2007 salmon run outlooks, spawning escapement goals, a summary of harvest sharing objectives, and an outline of management procedures to be used during the conduct of the 2007 fisheries. Numerical forecasts are presented for: Stikine sockeye and Chinook and Taku Chinook, which are required by the PST; Taku sockeye and coho; and Alsek sockeye and Chinook salmon. Outlooks for other stocks are given qualitatively with reference to brood year escapement data where available. The report also contains joint plans for fry plants and egg

collections and a detailed list of proposed field projects for 2007, identifying agency responsibility and contacts for the various functions within the projects.

F. JOINT TECHNICAL COMMITTEE ON DATA SHARING

No reports were finalized for publication during this reporting period.

G. JOINT SELECTIVE FISHERY EVALUATION COMMITTEE

No reports were finalized for publication during this reporting period

Publications of the Pacific Salmon Commission

PART VI
PUBLICATIONS OF THE PACIFIC SALMON COMMISSION

Documents listed herein are available to domestic fishery agencies of Canada and the United States, research organizations, libraries, scientists and others interested in the activities of the Commission, through the offices of the Secretariat, 600 - 1155 Robson Street, Vancouver, B.C., V6E 1B5. Photocopying charges may be levied for documents which are out of print.

Reports published by the Pacific Salmon Commission after March 31, 2000 including Commission annual reports, annual reports of the Fraser River Panel, Joint Technical Committee reports and technical reports of the Pacific Salmon Commission are also available in full text format on the Commission's website at www.psc.org.

Documents listed here are those which were published during the period from 2007/08 inclusive. For previous publications, please refer to the Pacific Salmon Commission's website at www.psc.org/publications.

A. ANNUAL REPORTS

21. Pacific Salmon Commission 2005/06 Twenty First Annual Report. March 2008.

B. REPORTS OF JOINT TECHNICAL COMMITTEES

i. Joint Chinook Technical Committee

52. TCCHINOOK(08)-1 *2007 Annual Report of Caatches and Escapements, Ex0ploitation Rate Analysis and Model Calibration.* February 2008.

ii. Joint Chum Technical Committee

21. TCCHUM(07)-1 – *2005 Post Summary Report.* June 2007.

iii. Joint Coho Technical Committee

No reports were finalized for publication during this reporting period.

iv. Joint Data Sharing Technical Committee

No reports were finalized for publication during this reporting period.

v. Joint Northern Boundary Technical Committee

No reports were finalized for publication during this reporting period.

vi. Joint Transboundary Technical Committee

39. TCTR (07)-1 *Salmon Management and Enhancement Plans for the Stikine, Taku and Alsek Rivers, 2006.* April 2007.

40. TCTR (07)-2 *Summary of the Transboundary Genetic Stock ID Workshop: January 18-19, 2007.* April 2007.

41. TCTR (07)-3 *Salmon Management and Enhancement Plans for the Stikine, Taku and Alsek Rivers, 2007.* December 2007.

vii. Selective Fishery Evaluation Committee

No reports were finalized for publication during this reporting period

C. REPORTS OF THE FRASER RIVER PANEL

17. *Report of the Fraser River Panel to the Pacific Salmon Commission on the 2003 Fraser River Sockeye Salmon Fishing Season.* PSC Staff. December 2007.

D. TECHNICAL REPORT SERIES OF THE PACIFIC SALMON COMMISSION

22. Boyce, I.A. and J.E. Andel. *Mark-Recapture Studies of Taku River Adult Sockeye Salmon Stocks in 2005.* PSC Tech. Rep. No. 22, November 2007.

23. *Recommendations for Application of Genetic Stock Identification (GSI) Methods to Management of Ocean Salmon Fisheries; Special Report of the GSI Steering Committee and the Pacific Salmon Commission's Committee on Scientific Cooperation.* PSC Tech. Rep. No. 23, January 2008.

24. *An Overview of Salmon Habitat and Restoration Related Activities in Canada and the United States 1999-2006. A Report of the Pacific Salmon Commission prepared by the Ad Hoc Habitat Scoping Committee.* PSC Tech. Rep. No. 24, January 2008

25. *An Action Plan in Response to Coded Wire Tag (CWT) Expert Panel Recommendations. A Report of the Pacific Salmon Commission CWT Workgroup.* PSC Tech. Rep. No. 25, March 2008.

E. PUBLICATIONS BY PACIFIC SALMON COMMISSION SECRETARIAT STAFF

No reports were finalized for publication during this reporting period.

F. REPORTS OF THE INTERNATIONAL PACIFIC SALMON COMMISSION

Responsibility for maintenance of the library of the International Pacific Salmon Fisheries Commission, on its termination December 31, 1985, was transferred to the Pacific Salmon Commission. Documents in the Library include historical archival papers which are available to researchers and other interested parties through contact with the Pacific Salmon Commission's Librarian.

Publication of John F. Roos' History of the International Pacific Salmon Fisheries Commission, and P. Gilhousen's Estimation of Fraser River Sockeye Escapements ended all publication series of the International Pacific Salmon Fisheries Commission. Copies of all in-print Progress Reports and Bulletins of the International Pacific Salmon Fisheries Commission are available free of charge through the Library of the Pacific Salmon Commission. Copies of the History of the International Pacific Salmon Fisheries Commission may also be ordered through the Library of the Pacific Salmon Commission.

G. DOCUMENTS SUBMITTED BY THE PARTIES

In compliance with provisions of the Treaty, the Parties provide annual post-season fishery reports and updates on their respective salmonid enhancement programs to the Commission. Documents received during 2007/08 were:

1. *Post Season Report for 2007 Canadian Treaty Limit Fisheries*. Canada Department of Fisheries and Oceans. January, 2008.

2. *Preliminary 2007 Post Season Report for United States Salmon Fisheries of Relevance to the Pacific Salmon Treaty*. United States Section, Pacific Salmon Commission. December, 2007

Report of the Auditors for 2007/2008

PART VII
AUDITORS' REPORT AND FINANCIAL STATEMENTS FOR THE PERIOD APRIL 1, 2007 TO MARCH 31, 2008

Financial Statements of

PACIFIC SALMON COMMISSION

Year ended March 31, 2008

KPMG LLP
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AUDITORS' REPORT TO THE COMMISSIONERS

We have audited the statement of financial position of the Pacific Salmon Commission (the "Commission") as at March 31, 2008 and the statements of operations and fund balances and cash flows for the year then ended. These financial statements have been prepared to comply with the Treaty Between the Government of Canada and the Government of the United States of America Concerning Pacific Salmon (the "Treaty"). These financial statements are the responsibility of the Commission's management. Our responsibility is to express an opinion on these financial statements based on our audit.

We conducted our audit in accordance with Canadian generally accepted auditing standards. Those standards require that we plan and perform an audit to obtain reasonable assurance whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by the Commission, as well as evaluating the overall financial statement presentation.

In our opinion, these financial statements present fairly, in all material respects, the financial position of the Commission as at March 31, 2008 and the results of its operations and its cash flows for the year then ended in accordance with the basis of accounting described in note 3 to the financial statements.

These financial statements, which have not been, and were not intended to be, prepared in accordance with Canadian generally accepted accounting principles, are solely for the information and use of the Contracting Parties for complying with the Treaty. The financial statements are not intended to be and should not be used by anyone other than the specified users or for any other purpose.

KPMG LLP

Chartered Accountants

Burnaby, Canada
May 30, 2008

PACIFIC SALMON COMMISSION

Statement of Operations and Fund Balances
(Expressed in Canadian dollars)

Year ended March 31, 2008, with comparative figures for 2007

		Restricted						
	General Fund	Working Capital Fund	Test Fishing Fund	Special Research Fund	Capital Assets Fund	Total	2008	2007
Revenue:								
Contributions from contracting parties (note 7)	$ 3,175,938	$ -	$ -	$ -	$ -	$ -	$ 3,175,938	$ 3,493,566
Grants	94,302	-	-	-	-	-	94,302	126,054
Interest	93,785	3,902	-	-	-	3,902	97,687	80,918
Other	40	-	-	-	-	-	40	-
Test fishing	1,055,820	-	-	-	-	-	1,055,820	674,852
	4,419,885	3,902	-	-	-	3,902	4,423,787	4,375,390
Expenses:								
Amortization	-	-	-	-	210,644	210,644	210,644	209,891
Salaries and employee benefits	2,296,811	-	-	-	-	-	2,296,811	2,369,886
Travel and transportation	139,095	-	-	-	-	-	139,095	92,913
Rents and communication	116,791	-	-	-	-	-	116,791	119,966
Printing and reproductions	13,833	-	-	-	-	-	13,833	6,821
Contract services	474,749	-	-	-	-	-	474,749	459,965
Materials and supplies	59,153	-	-	-	-	-	59,153	52,808
Foreign exchange loss (gain)	(6,749)	-	-	-	-	-	(6,749)	18,603
Test fishing	994,046	-	-	-	-	-	994,046	634,130
Loss on disposal of capital assets	-	-	-	-	2,574	2,574	2,574	763
Consultations and workshops	-	-	-	2,057	-	2,057	2,057	41,694
	4,087,729	-	-	2,057	213,218	215,275	4,303,004	4,007,440
Excess (deficiency) of revenue over expenses	332,156	3,902	-	(2,057)	(213,218)	(211,373)	120,783	367,950
Fund balance, beginning of year	299,082	103,051	482,310	99,944	544,383	1,229,688	1,528,770	1,160,820
Interfund transfers	(234,752)	(3,051)	61,773	-	176,030	234,752	-	-
Fund balance, end of year	$ 396,486	$ 103,902	$ 544,083	$ 97,887	$ 507,195	$ 1,253,067	$ 1,649,553	$ 1,528,770

See accompanying notes to financial statements.

PACIFIC SALMON COMMISSION

Statement of Financial Position
(Expressed in Canadian dollars)

March 31, 2008, with comparative figures for 2007

		Restricted						
	General Fund	Working Capital Fund	Test Fishing Fund	Special Research Fund	Capital Assets Fund	Total	2008	2007
Assets								
Current assets:								
Cash	$ 1,961,815	$ 103,902	$ 544,083	$ 97,887	$ -	$ 745,872	$ 2,707,687	$ 1,428,796
Accounts receivable	131,088	-	-	-	-	-	131,088	102,692
Due from Trusts	-	-	-	-	-	-	-	188,583
Interest receivable	4,939	-	-	-	-	-	4,939	5,081
Prepaid expenses	25,745	-	-	-	-	-	25,745	21,149
Short-term investments	50,000	-	-	-	-	-	50,000	50,000
	2,173,587	103,902	544,083	97,887	-	745,872	2,919,459	1,796,301
Capital assets (note 4)	-	-	-	-	507,195	507,195	507,195	544,383
	$ 2,173,587	$ 103,902	$ 544,083	$ 97,887	$ 507,195	$ 1,253,067	$ 3,426,654	$ 2,340,684
Liabilities and Fund Balances								
Current liabilities:								
Accounts payable and accrued liabilities	$ 173,089	$ -	$ -	$ -	$ -	$ -	$ 173,089	$ 156,076
Due to Trusts	196,700	-	-	-	-	-	196,700	-
Accrued benefit obligation (note 6)	290,794	-	-	-	-	-	290,794	372,125
Deferred revenue (note 7)	1,116,518	-	-	-	-	-	1,116,518	283,713
	1,777,101	-	-	-	-	-	1,777,101	811,914
Net assets:								
Unrestricted	396,486	-	-	-	-	-	396,486	299,082
Internally restricted	-	103,902	544,083	97,887	-	745,872	745,872	685,305
Invested in capital assets	-	-	-	-	507,195	507,195	507,195	544,383
	396,486	103,902	544,083	97,887	507,195	1,253,067	1,649,553	1,528,770
	$ 2,173,587	$ 103,902	$ 544,083	$ 97,887	$ 507,195	$ 1,253,067	$ 3,426,654	$ 2,340,684

See accompanying notes to financial statements.

Approved on behalf of the Commission:

_____ Chair, Standing Committee on Finance and Administration

_____ Vice-Chair, Standing Committee on Finance and Administration

PACIFIC SALMON COMMISSION

Statement of Cash Flows
(Expressed in Canadian dollars)

Year ended March 31, 2008, with comparative figures for 2007

	2008	2007
Cash provided by (used in):		
Operations:		
Excess of revenue over expenses	$ 120,783	$ 367,950
Items not involving cash:		
Amortization	210,644	209,891
Loss on asset dispositions	2,574	763
Net change in non-cash operating working capital	1,120,920	(713,509)
	1,454,921	(134,905)
Investing:		
Additions to capital assets	(183,880)	(293,827)
Proceeds on sale of assets	7,850	9,337
	(176,030)	(284,490)
Increase (decrease) in cash	1,278,891	(419,395)
Cash, beginning of year	1,428,796	1,848,191
Cash, end of year	$ 2,707,687	$ 1,428,796

See accompanying notes to financial statements.

1. Nature of organization:

The Pacific Salmon Commission (the "Commission") was established by the Treaty between the Governments of Canada and the United States of America (the "Contracting Parties") to promote cooperation in the management, research and enhancement of Pacific salmon stocks. The Treaty was ratified on March 18, 1985 and renewed on June 30, 1999, and the Commission commenced operations on September 26, 1985.

2. Adoption of accounting policy:

Effective with the commencement of its 2008 fiscal year, the Commission adopted the recommendations of the Canadian Institute of Chartered Accountants ("CICA") Handbook Section 3855, *Financial Instruments - Recognition and Measurement* and CICA Handbook Section 3861, *Financial Instruments - Disclosure and Presentation.* These new Handbook Sections provide comprehensive requirements for the recognition and measurement of financial instruments.

Under Handbook Section 3855, all financial instruments are classified into one of the following five categories: held for trading, held-to-maturity investments, loans and receivables, available-for-sale financial assets or other financial liabilities. All financial instruments, including derivatives, are included on the statement of financial position and are measured at fair market value, with the exception of loans and receivables, investments held-to-maturity and other financial liabilities, which are measured at amortized cost. Measurement in subsequent periods depends on whether the financial instrument has been classified as held for trading, available-for-sale, held-to-maturity, loans and receivables, or other liabilities.

The Commission classifies its cash and short-term investments as held for trading.

Adoption of this policy resulted in no material impact to the carrying value of financial assets.

3. Significant accounting policies:

(a) Basis of accounting:

These financial statements present the financial position and results of operation of the Commission to comply with the requirements of the Treaty between the Government of Canada and the Government of the United States of America concerning Pacific Salmon, and may not be appropriate for other purposes. As required by Chapter IX Section D of the Commission Bylaws, the financial statements are prepared on an accrual basis except that purchase order expenses are recognized at the time that the commitment for goods and services are made, rather than at the time that the goods or services are delivered. In all other material respects, these financial statements have been prepared in accordance with Canadian generally accepted accounting principles for not-for-profit entities.

3. Significant accounting policies: (continued)

(b) Fund accounting and revenue recognition:

(i) Revenue recognition:

The Commission follows the restricted fund method of accounting for contributions from Contracting Parties.

Restricted contributions related to general operations are initially deferred and recognized as revenue of the General Fund in the year in which the related expenses are incurred. All other restricted contributions are recognized as revenue of the appropriate restricted fund.

Unrestricted contributions are recognized as revenue of the General Fund in the year received or receivable if the amount to be received can be reasonably established and collection is reasonably assured.

The Fund classifications are as follows:

(ii) The General Fund includes funds provided annually through contributions from the Contracting Parties and any net surplus obtained through the test fishing program. By agreement of the Contracting Parties, any unexpended balance remaining at the end of one fiscal year may be used to offset contributions in the following year or may be used to offset a shortfall between contributions and approved expenses in the following year.

(iii) The Working Capital Fund represents monies contributed by the Contracting Parties to be used temporarily pending receipt of new contributions from the Contracting Parties at the beginning of a fiscal year, or for special programs not contained in the regular budget but approved during the fiscal year. Any surplus above a pre-determined fixed limit in the account at the end of the fiscal year is transferred to the General fund and is treated as income.

(iv) The Test Fishing Fund is established as a revolving fund in which a portion of net test fishing revenues realized in years of high abundance are reserved to be used to support test fishing programs in years of low abundance and when conservation concerns are an issue.

(v) The Special Research Fund represents monies set aside to fund additional programs as determined by the Contracting Parties, including Coded Wire Tag Investigation, studies related to Coho salmon and Bilateral Workshop for Genetics Analysis Pacific Salmonids Group.

(vi) The Capital Assets Fund reflects the Commission's capital asset transactions. Amortization is charged to the Capital Fund.

3. Significant accounting policies: (continued)

(c) Trust funds:

(i) The Commission administers and holds in trust the Northern Boundary and Transboundary River Restoration and Enhancement Trust Fund and the Southern Boundary Restoration and Enhancement Trust Fund. The assets, liabilities, revenue and expenses of these trust funds are not included in the Commission's financial statements.

(ii) The Commission also administers and holds amounts in trust funds on behalf of the Government of the United States (the "Government") to disburse U.S. section salary under a Memorandum of Understanding. The assets, liabilities, revenue and expenses of these trust funds are not included in the Commission's financial statements.

(d) Capital assets:

Capital assets are stated at cost less accumulated amortization. Costs of repairs and replacements of a routine nature are charged as a current expense while those expenses which improve or extend the useful life of the assets are capitalized. Amortization is provided using the straight-line method of rates sufficient to amortize the costs over the estimated useful lives of the assets.

Automobiles	5 years
Boats	5 years
Computer equipment and software	3 years
Equipment	5 years
Furniture and fixtures	10 years
Leasehold improvements	10 years

(e) Income taxes:

The Commission is a non-taxable organization under the Foreign Missions and International Organizations Act (1991).

3. Significant accounting policies: (continued)

(f) Post-employment benefits:

The Commission provides certain employee future benefits, including a defined benefit pension plan, which is funded by the Commission on an annual basis, and severance, life insurance and medical benefits, which are funded by the Commission as they become due.

The Commission accrues its obligations under employee benefit plans and the related costs as benefits are earned, net of returns on plan assets.

The Commission's policies are as follows:

(i) The cost of retirement benefits earned by employees is actuarially determined using the projected benefit method prorated on service and management's best estimate of expected plan investment performance, salary escalation and retirement ages of employees.

(ii) The expected interest cost on any prior service obligation is calculated using management's estimate for the long-term rate of return.

(iii) The expected return on plan assets is calculated at a market-related value for the assets.

(iv) Any cumulative unrecognized actuarial gains and losses in excess of 10% of the projected benefit obligation will be amortized over the expected average remaining service life of the employee group covered by the program.

(v) As at January 1, 2008, the Commission had an unamortized transitional asset of $55,067 (2007 - $62,933), which is being amortized over 17 years, representing the expected average remaining service life of the related employee group at the transition date.

(vi) As at January 1, 2008, the Commission had an unamortized transitional obligation of $99,000 (2006 - nil), which is being amortized over four years, representing the expected average remaining service life of the employee group of the supplemental executive retirement plan at the transition date.

(g) Foreign exchange translation:

Transactions originating in foreign currencies are translated at the exchange rate prevailing at the transaction dates. Assets and liabilities denominated in foreign currency at the balance sheet date are translated to equivalent Canadian amounts at the current rate of exchange. Foreign exchange gains and losses resulting from translation are included in the determination of excess or deficiency of revenue over expenses.

3. Significant accounting policies: (continued)

(h) Use of estimates:

The preparation of financial statements requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Significant areas requiring the use of management estimates relate to the determination of the valuation of accounts receivable, useful lives of capital assets for amortization and accrued liabilities. Actual results could differ from those estimates. Adjustments, if any, will be reflected in operations in the period of settlement.

4. Capital assets:

	Cost	Accumulated amortization	2008 Net book value	2007 Net book value
Automobiles	$ 216,479	$ 161,410	$ 55,069	$ 55,907
Boats	133,497	117,967	15,530	16,091
Computer equipment	670,060	594,371	75,689	69,921
Computer software	187,634	177,797	9,837	11,425
Equipment	1,161,621	924,555	237,066	312,107
Furniture and fixtures	303,924	266,598	37,326	43,204
Leasehold improvements	133,519	56,841	76,678	35,728
	$ 2,806,734	$ 2,299,539	$ 507,195	$ 544,383

5. General fund balance:

The Commission has approved a carryover of the unexpended funds in the General Fund to be utilized as follows:

	2008	2007
Continuing operations	$ 370,741	$ 277,933
Reserve for prepaid expenses	25,745	21,149
	$ 396,486	$ 299,082

6. Employee future benefits:

The Commission and its employees contribute to the Pension Plan of the International Fisheries Commissions Pension Society for Employees of Participating Commissions with Headquarters in Canada, a multi-employer defined benefit plan. The plan covers 66 employees, of which 40 are current or past employees of the Commission. The Commission also provides employee future benefits including severance, life insurance and medical benefits.

The Commission's liabilities are based on an actuarial valuation using an early measurement date of January 1, 2008.

	Pension plan	Severance, life insurance and medical benefits	2008	2007
Reconciliation of accrued benefit obligation:				
Opening fair value of accrued benefit obligation	$(8,340,000)	$ (333,128)	$ (8,673,128)	$ (8,167,679)
Current service cost	(232,204)	(33,700)	(265,904)	(214,300)
Benefits paid	189,704	7,401	197,105	200,020
Interest cost	(423,868)	(18,157)	(442,025)	(401,915)
Transitional obligation	(99,000)	-	(99,000)	-
Actuarial gain	842,368	(148,616)	693,752	(89,254)
Ending fair value of accrued benefit obligation	$(8,063,000)	$ (526,200)	$ (8,589,200)	$ (8,673,128)

	Pension plan	Severance, life insurance and medical benefits	2008	2007
Reconciliation of plan assets:				
Opening fair value of plan assets	$ 5,947,981	$ -	$ 5,947,981	$ 5,135,052
Actual return on plan assets	5,346	-	5,346	614,634
Employer contributions	361,223	7,401	368,624	308,851
Employee contributions	93,796	-	93,796	89,464
Benefits paid	(189,704)	(7,401)	(197,105)	(200,020)
Ending fair value of plan assets	$ 6,218,642	$ -	$ 6,218,642	$ 5,947,981
Net unfunded obligation	$ (1,844,358)	$ (526,200)	$ (2,370,558)	$ (2,725,147)
Unamortized transitional obligation (asset)	43,933	-	43,933	(62,933)
Unamortized net actuarial loss	1,887,215	148,616	2,035,831	2,415,955
Accrued benefit liability	$ 86,790	$ (377,584)	$ (290,794)	$ (372,125)

6. Employee future benefits: (continued)

The significant actuarial assumptions adopted in measuring the Commission's accrued pension benefit liability are as follows:

	2008	2007
Discount rate	5.5%	5%
Expected long-term rate of return on plan assets	7%	7%
Rate of compensation increase	3.5%	4%

The plan asset portfolio currently comprises equity investments and debt. Equity investments are 63.96% (2007 - 65.29%) of the portfolio and include Canadian and International investments. Debt is 36.04% (2007 - 34.71%) of the portfolio and comprises short-term debt, bonds and mortgages. Asset mix is reviewed periodically and may vary in the future.

The Commission's net benefit plan expense is as follows:

	2008	2007
Current service cost (less employees contributions)	$ 172,108	$ 214,300
Interest cost	442,025	401,915
Expected return on plan assets	(417,846)	(360,374)
Amortization of transitional asset	(7,866)	(7,866)
Amortization of net actuarial loss	98,872	117,452
Net benefit plan expense	$ 287,293	$ 365,427

The net benefit plan expense is included in salaries and employee benefits on the statement of operations and fund balances.

7. Contracting parties:

The Commission's only related parties are the Contracting Parties.

During the fiscal year ended March 31, 2008, the Commission received contributions from Contracting Parties totaling $3,175,938 (2007 - $3,493,566). The Commission incurred no expenses to the Contracting Parties during the year.

The Commission received $1,011,459 (2007 - $283,713) of contributions from one of the Contracting Parties relating to fiscal year March 31, 2009. This contribution is included in deferred revenue.

8. Financial instruments:

The financial instruments consist of cash, accounts receivable, interest receivable, short-term investments and accounts payable and accrued liabilities. The carrying amounts of these financial instruments are a reasonable estimate of their fair values due to the relatively short term to maturity.

9. Trust funds:

The Commission administers and holds in trust the following funds which are not included in the Commission's financial statements:

(a) Northern Boundary and Transboundary River Restoration and Enhancement Trust Fund:

Northern Boundary and Transboundary River Restoration and Enhancement Trust Fund ("Northern Boundary") was created by the Governments of the United States of America and Canada to manage its interest in the Commission to promote cooperation in the management, research and enhancement of Pacific Salmon stocks. The income earned on these contributions is distributed by the Commission as directed by the Northern Enhancement Committee.

(b) Southern Boundary and Transboundary River Restoration and Enhancement Trust Fund:

Southern Boundary and Transboundary River Restoration and Enhancement Trust Fund ("Southern Boundary") was created by the Governments of the United States of America and Canada to manage its interest in the Commission to promote cooperation in the management, research and enhancement of Pacific Salmon stocks. The income earned on these contributions is distributed by the Commission as directed by the Southern Enhancement Committee.

(c) Payroll Trust funds:

The Commission administers and holds trust funds on behalf of the Government of the United States to distribute U.S. section salary under a Memorandum of Understanding. These amounts have been excluded from the statement of financial position and statement of operations and fund balances of the Commission.

9. Trust funds (continued):

(d) Summary of trust fund balances:

	Northern Boundary	Southern Boundary	Payroll Trust Funds	2008 Total	2007 Total
Assets	$ 114,600,125	$ 94,675,536	$ 13,993	$ 209,289,654	$ 209,573,847
Liabilities and fund balances					
Liabilities	$ 101,650	$ 85,398	$ 13,993	$ 201,041	$ 448,620
Fund balances	114,498,475	94,590,138	-	209,088,613	209,125,227
	$ 114,600,125	$ 94,675,536	$ 13,993	$ 209,289,654	$ 209,573,847

	Northern Boundary	Southern Boundary	Payroll Trust Funds	2008 Total	2007 Total
Fund balance, beginning of year	$ 113,975,044	$ 95,150,183	$ -	$ 209,125,227	$ 204,072,420
Revenue	(15,702,045)	(13,185,113)	-	(28,887,158)	14,741,330
Expenses	(4,682,031)	(4,542,500)	-	(9,224,531)	(9,688,523)
Transitional adjustment on adoption of new accounting standards	20,907,507	17,167,568	-	38,075,075	-
Fund balance, end of year	$ 114,498,475	$ 94,590,138	$ -	$ 209,088,613	$ 209,125,227

Combined Financial Statements of

NORTHERN BOUNDARY AND TRANSBOUNDARY RIVER RESTORATION AND ENHANCEMENT TRUST FUND

and of

SOUTHERN BOUNDARY RESTORATION AND ENHANCEMENT TRUST FUND

Year ended March 31, 2008

KPMG

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AUDITORS' REPORT TO THE TRUSTEES

We have audited the combined statement of financial position of The Northern Boundary and Transboundary River Restoration and Enhancement Trust Fund and of The Southern Boundary Restoration and Enhancement Trust Fund (the "Trusts") as at March 31, 2008 and the combined statements of operations and fund balance and cash flows for the year then ended. These financial statements are the responsibility of the Trusts' management. Our responsibility is to express an opinion on these financial statements based on our audit.

We conducted our audit in accordance with Canadian generally accepted auditing standards. Those standards require that we plan and perform an audit to obtain reasonable assurance whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation.

In our opinion, these combined financial statements present fairly, in all material respects, the financial position of the Trusts as at March 31, 2008 and the results of its operations and its cash flows for the year then ended in accordance with Canadian generally accepted accounting principles.

The comparative figures were unaudited.

KPMG LLP

Chartered Accountants

Burnaby, Canada
May 30, 2008

NORTHERN BOUNDARY AND TRANSBOUNDARY RIVER RESTORATION AND ENHANCEMENT TRUST FUND
and of
SOUTHERN BOUNDARY RESTORATION AND ENHANCEMENT TRUST FUND
Combined Statement of Financial Position
(Expressed in Canadian dollars)

March 31, 2008, with comparative figures for 2007

	Northern Boundary	Southern Boundary	2008 Total	2007 Total
				(unaudited)
Assets				
Current assets:				
Cash and cash equivalents	$ 8,665,688	$ 5,467,007	$ 14,132,695	$ 12,021,710
Due from (to) Pacific Salmon Commission	101,195	95,505	196,700	(188,583)
Interest receivable	20,657	13,368	34,025	29,077
	8,787,540	5,575,880	14,363,420	11,862,204
Investments (note 4)	105,812,585	89,099,656	194,912,241	197,508,465
	$ 114,600,125	$ 94,675,536	$ 209,275,661	$ 209,370,669
Liabilities and Fund Balance				
Current liabilities:				
Accounts payable and accrued liabilities	$ 101,650	$ 85,398	$ 187,048	$ 245,442
Fund balance	114,498,475	94,590,138	209,088,613	209,125,227
	$ 114,600,125	$ 94,675,536	$ 209,275,661	$ 209,370,669

See accompanying notes to combined financial statements.

Contractual obligations (note 5)

NORTHERN BOUNDARY AND TRANSBOUNDARY RIVER RESTORATION AND ENHANCEMENT TRUST FUND
and of
SOUTHERN BOUNDARY RESTORATION AND ENHANCEMENT TRUST FUND

Combined Statement of Operations and Fund Balance
(Expressed in Canadian dollars)

Year ended March 31, 2008, with comparative figures for 2007

	Northern Boundary	Southern Boundary	2008 Total	2007 Total
				(unaudited)
Revenue:				
Investment income (loss)	$ (15,702,045)	$ (13,185,113)	$ (28,887,158)	$ 14,741,230
Expenses:				
Administrative services (note 7)	124,918	124,919	249,837	241,692
Travel and accommodation	36,949	23,620	60,569	75,600
Rents and communications	2,932	1,557	4,489	3,475
Contract services	18,665	41,036	59,701	76,158
Investment management services	631,885	533,570	1,165,455	1,315,146
Project grants	3,845,478	3,759,637	7,605,115	7,969,655
Materials and supplies	958	1,622	2,580	6,797
Foreign exchange loss (gain)	20,246	56,539	76,785	(100)
	4,682,031	4,542,500	9,224,531	9,688,423
Excess (deficiency) of revenue over expenses	(20,384,076)	(17,727,613)	(38,111,689)	5,052,807
Fund balance, beginning of year	113,975,044	95,150,183	209,125,227	204,072,420
Transitional adjustment on adoption of new accounting standards (note 2)	20,907,507	17,167,568	38,075,075	-
Fund balance, end of year (note 6)	$ 114,498,475	$ 94,590,138	$ 209,088,613	$ 209,125,227

See accompanying notes to combined financial statements.

NORTHERN BOUNDARY AND TRANSBOUNDARY RIVER RESTORATION AND ENHANCEMENT TRUST FUND
and of
SOUTHERN BOUNDARY RESTORATION AND ENHANCEMENT TRUST FUND
Combined Statement of Cash Flows
(Expressed in Canadian dollars)

Year ended March 31, 2008, with comparative figures for 2007

	Northern Boundary	Southern Boundary	2008 Total	2007 Total
				(unaudited)
Cash provided by (used in):				
Operations:				
Excess (deficiency) of revenue over expenses	$ (20,384,076)	$ (17,727,613)	$ (38,111,689)	$ 5,052,807
Non-cash item:				
Unrealized loss on investments	18,243,257	15,274,705	33,517,962	
Change in non-cash operating working capital:				
Due from Pacific Salmon Commission	(201,696)	(183,587)	(385,283)	-
Interest receivable	(3,393)	(1,555)	(4,948)	(24,018)
Accounts payable and accrued liabilities	(32,576)	(25,818)	(58,394)	(795,370)
	(2,378,484)	(2,663,868)	(5,042,352)	4,233,419
Investing:				
Decrease in investments	4,168,172	2,985,165	7,153,337	376,715
Increase in cash and cash equivalents	1,789,688	321,297	2,110,985	4,610,134
Cash and cash equivalents, beginning of year	6,876,000	5,145,710	12,021,710	7,411,576
Cash and cash equivalents, end of year	$ 8,665,688	$ 5,467,007	$ 14,132,695	$ 12,021,710
Supplementary information:				
Non-cash item:				
Transitional adjustment on adoption of new accounting standards	$ 20,907,507	$ 17,167,568	$ 38,075,075	$ -

See accompanying notes to combined financial statements.

1. Nature of organization:

The Northern Boundary and Transboundary River Restoration and Enhancement Trust Fund and the Southern Boundary Restoration and Enhancement Trust Fund (the "Trusts") were created by the Governments of the United States of America and Canada to manage its interest in the Pacific Salmon Commission (the "Commission") to promote cooperation in the management, research and enhancement of Pacific salmon stocks. The financial statements are prepared on a combined basis due to the common administration by the management of the Pacific Salmon Commission.

2. Adoption of accounting policy:

Effective with the commencement of its 2008 fiscal year, the Trusts adopted the recommendations of the Canadian Institute of Chartered Accountants ("CICA") Handbook Section 3855, *Financial Instruments - Recognition and Measurement* and CICA Handbook Section 3861, *Financial Instruments - Disclosure and Presentation*. These new Handbook Sections provide comprehensive requirements for the recognition and measurement of financial instruments.

Under Handbook Section 3855, all financial instruments are classified into one of the following five categories: held for trading, held-to-maturity investments, loans and receivables, available-for-sale financial assets or other financial liabilities. All financial instruments, including derivatives, are included on the statement of financial position and are measured at fair market value, with the exception of loans and receivables, investments held-to-maturity and other financial liabilities, which are measured at amortized cost. Measurement in subsequent periods depends on whether the financial instrument has been classified as held for trading, available-for-sale, held-to-maturity, loans and receivables, or other liabilities.

The Trusts have designated their investments as held for trading.

As a result of the adoption of this policy, the unrestricted net assets and investments as at April 1, 2007 increased by $20,907,507 in the Northern Boundary and $17,167,568 in the Southern Boundary.

3. Significant accounting policies:

(a) Basis of accounting:

These combined financial statements present the financial position and results of operation of the Trusts in accordance with Canadian generally accepted accounting principles for not-for-profit organizations.

3. Significant accounting policies (continued):

(b) Financial instruments:

Investments

All of the Trusts' investments held on April 1, 2007 or acquired subsequently are designated as held for trading investments under the new standards. Purchases and sales of investments are recorded on a trade date basis. Held for trading investments are measured at fair value with realized and unrealized gains and losses included on the combined statement of operations.

The adoption of these new standards required the application of specific transitional provisions that necessitated the restatement of the opening net assets as of April 1, 2007.

(c) Cash and cash equivalents:

Cash and cash equivalents are comprised of cash on hand and short term deposits that are readily convertible to known amount of cash and which are subject to an insignificant risk of changes in value.

(d) Income taxes:

The Trusts are non-taxable organizations under the Foreign Missions and International Organizations Act (1991).

(e) Foreign exchange translation:

Transactions originating in foreign currencies are translated at the exchange rate prevailing at the transaction dates. Monetary items and non-monetary assets that are carried at market denominated in foreign currency at the balance sheet date are translated to equivalent Canadian amounts at the exchange rate in effect at the balance sheet date. Foreign exchange gains and losses resulting from translation are included in the determination of excess or deficiency of revenue over expenses.

(f) Use of estimates:

The preparation of financial statements requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Adjustments, if any, will be reflected in operations in the period of settlement.

3. Significant accounting policies (continued):

(g) Contractual obligations:

Contractual obligations are funded in instalments and payments are due based on conditions included in the contract being satisfied. Expenses and liabilities are recognized in the financial statements as these conditions are met.

4. Investments:

Investments consist of mutual funds under the supervision of a custodian. These investments have been designated as held for trading and are measured at fair value with realized and unrealized gains and losses included on the combined statement of operations.

Investments as at March 31 consist of the following managed funds:

	Northern Boundary	Southern Boundary	2008 Total	2007 Total
				(unaudited)
International Equity Fund	$ 20,145,798	$ 16,963,802	$ 37,109,600	$ 44,474,457
US Equity Fund	29,340,354	24,706,092	54,046,446	67,684,442
Global Equity Fund	21,850,045	18,398,865	40,248,910	52,293,842
Canadian Bond	34,476,388	29,030,897	63,507,285	71,113,800
	$ 105,812,585	$ 89,099,656	$ 194,912,241	$ 235,566,541
Historical cost	$ 104,018,530	$ 87,941,448	$ 191,959,978	$ 197,508,465

5. Contractual obligations:

The Trusts have entered into a number of project grant contracts as at March 31, 2008 for the future funding of research projects to be completed subsequent to the year end.

These contractual obligations are funded in instalments and payments are due based on conditions included in the contract being satisfied. As such, no liability has been accrued in the financial statements as the Trusts are not liable until these conditions have been met.

The research project contractual obligations of Northern Boundary are $2,490,427 (2007 - $1,717,885) and of the Southern Boundary are $1,863,528 (2007 - $2,133,074) as at March 31, 2008.

6. Minimum fund balances:

In line with Chapter IX – 'Financial Regulations' Section F of the Pacific Salmon Commission By-laws, the total expenditures of the Trusts must not exceed the total income from the Principal. The Principal was the amount provided at the point of constitution of the Trusts and was US $74,837,400 from the Government of the United States of America and CAD $250,000 from the Government of Canada in the Northern Boundary and US $64,902,400 from the Government of the United States of America and CAD $250,000 from the Government of Canada in the Southern Boundary. As at March 31, 2008, the Northern and Southern Funds were in excess of the minimum fund balances.

7. Administrative services:

The Commission charges an administrative service to the Trusts representing an allocation of Commission salaries and benefits expenses incurred on behalf of the Trusts.

Appendices

Appendix A

Northern Fund Projects for 2007/2008

	Enhancement - 13		
No.	**Project Title**	**Proponent**	**US$**
1	Trapper Lake sockeye access improvement	Mercer	$ 50,000
2	Salmon enhancement scoping in Northern & Central BC	Levy & Lill	$ 84,478
3	Coho presmolt enhancement project Bakewell Lake system	Burke	$ 190,000
4	Purchase of a Biosonics hydro- acoustic sonar unit	Mercer	$ 39,300
5	Determining the Trend of Chum Population Dynamics in Area 5	Lemon	$ 31,362
6	Lakelse lake: Fry outplanting project. Year 2.	Miller	$ 55,366
7	Lakelse lake: spawning channel/spawning habitat feasibility study	Miller	$ 41,078
8	Snootli Hatchery chinook augmentation	Hilland	$ 78,980
9	Tuya River harvest study (year four)	Etherton	$ 90,014
10	Sockeye outplanting to hanging lakes regulatory & logistic issues	Picard	$ 93,705
11	The conservation of Kitwanga sockeye salmon through the enhancement of a complete life cycle	Cleveland	$ 80,370
12	Coho netpen expansion at Pallant Creek Hatchery	Fairweather	$ 58,521
13	McDonald lake sockeye sentinel fish	Burke	$ 201,900
	Enhancement total		**$ 1,095,074**

	Habitat - 5		
No.	**Project Title**	**Proponent**	**US$**
1	Upper Skeena fish passage - culvert assessment	Gottesfeld	$ 97,416
2	Assessment of critical salmon habitat in transboundary river estuaries	Lorenz	$ 92,815
3	Kitwanga sockeye salmon spawning habitat improvement initiative, 2007	Cleveland	$ 75,905
4	Critical salmon habitat mapping for the Stikine drainage	Erhardt	$ 41,392
5	Assessment of sockeye spawning distribution and habitat in Tahltan Lake	Frocklage	$ 61,069
	Habitat total		**$ 368,597**

	Improved Information - 27		
No.	**Project Title**	**Proponent**	**US$**
1	Morice chinook CWT group	O'Neill	$ 23,218
2	Habitat-based chinook escapement. Clear rivers in Northern BC	Winther	$ 42,953
3	QCI sport chinook DNA stock composition	Winther	$ 31,255
4	Chinook salmon SNP development & SNP baseline	Beacham	$ 40,000
5	Babine River remote video enumeration of coho and other species.	Finnegan	$ 30,496
6	Stikine, Taku, and Alsek River sockeye, chinook, and coho salmon baseline DNA profiles	Johnston	$ 163,400
7	Middle Nass mark-rate sampling program for adult coho salmon: Seaskinnish weir program	Stephens	$ 59,831
8	Coastal Area 3 escapement and enhancement monitoring - Kincolith R. weir program	Stephens	$ 67,868
9	Upgrade of Slamgeesh Lake Weir	Hall	$ 82,937
10	Skeena sockeye lakes hydroacoustic surveys	Gottesfeld	$ 27,591
11	In season forecasting of regional scale abundance of NBC coho	Cox	$ 32,867
12	Population estimate for Alsek River sockeye salmon 2006	Waugh	$ 18,932

13	Population estimate for Alsek River chinook 2007	Waugh	$ 17,800
14	Juvenile chinook rearing in the Skeena watershed	Gottesfeld	$ 103,467
15	Stikine River CWT augmentation (three year proposal)	Etherton	$ 60,009
16	Canadian Northern Boundary sockeye stock ID supplemental sample	Cox-rogers	$ 40,185
17	A feasibility study to determine the potential to develop a stock assessment tool on the Cranberry River	Cleveland	$ 13,350
18	Kitwanga River sockeye salmon enumeration, 2007	Cleveland	$ 31,255
19	Northern Boundary Area sockeye genetic stock identification	Wilmot	$ 218,200
20	Remote-sensed approach to mapping and quantifying important salmon habitats in the Lower Taku River, and implications for model development Assessment of critical salmon habitat in transboundary river estuaries	Frenette and Lorenz	$ 143,300
21	McDonald Lake sockeye escapement estimate	Johnson	$ 93,000
22	Southeast Alaska chinook salmon age, sex, length	Pahlke	$ 98,972
23	Estimating the chinook stock composition of Southeast Alaska fisheries	Templin	$ 313,434
24	Taku River fish wheels	Jones	$ 56,750
25	Northern and Transboundary sockeye matched scale-tissue sampling	Oliver	$ 107,075
26	Rivers Inlet echo sounding program (sockeye)	Stevenson	$ 78,192
27	The Long Lake watershed chinook escapement study	Stevenson	$ 42,864
	Improved Information total		**$ 2,039,201**
	Improved Information carried forward		
No.	**Project Title**	**Proponent**	**US$**
1	Marx Creek Rehabilitation	Tisler	$ 66,397
2	Chickamin River chinook coded wire tagging & escapement sampling	Pahlke	$ 84,904
3	Taku River coho salmon escapement and smolt tagging augmentation	Boyce	$ 44,000
4	Chilkat River chinook salmon coded wire tagging project	Ericksen	$ 89,330
			$ 284,631
49	13 US and 36 Can		**$ 3,787,503**
	Special Cases		
No.	**Project Title**	**Proponent**	**US$**
1	Committee for Scientific Cooperation Fund	CSC	$ 50,000
2	Chinook Technical Committee Fund	CTC	$ 50,000
			$ 100,000

Appendix B

Southern Fund Projects for 2007/2008

Enhancement - 5

No.	Project Title	Proponent	US $
1	Campbell River mainstem chinook enhancement - year #3 of 6 year brood cycle	Gage	$ 8,993
2	Salmon River chinook recovery	Mitchell	$ 4,019
3	DNA sampling of broodstock used for the recovery of Cultus Lake sockeye	Latham	$ 8,559
4	Evaluation of using an electrical barrier as a seal deterrent	Cave	$ 31,255
5	Predator control to enhance sockeye salmon freshwater survival in Cultus Lake	Connolly	$ 63,885
		Enhancement total	**$ 116,712**

Habitat Restoration - 24

No.	Project Title	Proponent	US $
1	Kauwinch River sidechannel habitat enhancement, WCVI	Dunlop	$ 17,799
2	Charters Creek salmon habitat restoration project	Hamly	$ 13,377
3	Boatman Grove channel and wetlands restoration	Brownscombe	$ 10,000
4	Englishman side-channel phase 2 -channel construction	Grant	$ 89,300
5	Cowichan River - Stoltz Bluff remediation (year 2 of multi-year project)	Craig	$ 50,000
6	Chilliwack off-channel habitat project	Englund	$ 61,617
7	Nahmint chinook habitat restoration side-channel feasibility	Sheng	$ 13,411
8	Millstone River by-pass side-channel	Corscadden	$ 111,625
9	Water use planning forum for Stamp-Somass-Sproat rivers, Port Alberni	Whiteman	$ 89,300
10	Coldwater River habitat restoration	Coutlee	$ 56,468
11	McKenzie-Willamette confluence floodplain restoration project (phase I)	Moll	$ 50,000
12	Salmonid habitat restoration project	Wright	$ 43,989
13	Harris Creek side channel 2007	Dunn	$ 66,975
14	South Thompson salmon habitat restoration	Hallinan (Romyn)	$ 53,580
15	Squamish River estuary restoration	Tobe	$ 25,366
16	Nisqually River off-channel fish passage restoration	Moon	$ 47,000
17	Nicola Basin stream flow recovery and development of in-stream flow requirements	Hallinan (Parks)	$ 71,440
18	Contaminant exposure risk to developing Cultus Lake sockeye embryo's	Grant	$ 41,078
19	Habitat assessment and rehabilitation designs for Koksilah River watershed	Elliott	$ 20,000
20	Water storage feasibility on east coast Vancouver Island	Craig	$ 26,790
21	Somass Estuary salt water marsh restoration	Edgell	$ 44,650
22	Fish passage improvements at man made structures	Bennett (Carlson)	$ 35,000
23	North Fork Nooksack side-channel project	Hyatt	$ 65,000
24	Inventory fall chinook spawning habitat in Oregon's coastal river basins	Riggers	$ 70,000
		Habitat total	**$ 1,173,766**

Improved Information - 37

No.	Project Title	Proponent	US $
1	Southern study area chum stock distribution assessment in Washington San Juan Islands - Pt. Roberts and in British Columbia southern gulf fisheries	Kirby	$ 67,203
2	Estimates of the abundance of hatchery chinook in wild spawning populations	Till	$ 43,565
3	Origins of unmarked returns to wild coho indicators	Holtby	$ 20,735
4	Effects of smolt size and ocean growth on marine survival of coho smolts in wild populations of Georgia Strait and WCVI	Holtby	$ 2,215
5	Calibration of assessment methods for Fraser sockeye enumeration	Benner	$ 49,060
6	Terminal run reconstruction of Fraser, West Coast Vancouver Island, and Georgia Strait coho stocks for 1986 to 1997	Gazey	$ 16,074
7	Sampling of chinook Double Index Tags recoveries in southern BC commercial fisheries	Fraser	$ 40,167
8	Collection and analysis of DNA based stock composition data – WCVI chinook troll fishery	Mathias	$ 84,835
9	Feasibility study to develop a Lower Fraser live capture and tagging facility for salmon and assess the in-river migration behaviour and survival of radio-tagged sockeye from Mission to the spawning grounds	English	$ 382,422
10	Assessing growth and survival of juvenile chinook and coho salmon off the West coast of Vancouver Island	Beckman	$ 39,230
11	Coldwater River resistivity counter calibration	Coutlee	$ 26,129
12	Estimate spawning escapement, juvenile production, and contribution to fisheries of Coweeman River fall chinook salmon	Sharpe	$ 192,589
13	Mixed stock analysis of selective and sport chinook fisheries in Strait of Juan de Fuca and Puget Sound using molecular markers	Warheit (Hawkins)	$ 78,440
14	Reference points and ER caps development for Canadian MU's	Tompkins	$ 43,668
15	Assessment of Thompson River coho stock distribution in North Puget Sound fisheries	Kirby	$ 77,535
16	Evaluation of the potential freshwater factors linked to the decline of Early and Late Stuart sockeye salmon	Patterson	$ 120,555
17	Use of PIT tags to determine upstream migratory timing and survival of Columbia Basin sockeye salmon	Fryer	$ 21,422
18	Estimation and documentation of production expansion factors for 1986 to 1997 using the Bayesian Mixed Stock Model	Gazey	$ 42,864
19	Genetic Stock Identification - collection of baseline data for WCVI chinook stocks	Lane	$ 18,156
20	BC Mark Selective Fishery (MSF) Coded Wire Tag (CWT) sport expansion algorithms	Fraser	$ 39,739
21	Determine origin of out of basin stray fall chinook salmon in the Deschutes River, Oregon	Brun	$ 35,031
22	A feasibility study to determine the value of hydroacoustic monitoring of migrating sockeye and pink salmon in the marine area	Vagle	$ 128,994
23	Nanaimo River chinook indicator stream surrogate	Banks	$ 35,720
24	Feasibility investigation and development of an indicator stock program at the Chilko River for Fraser River 1.3 summer chinook	Bailey	$ 39,962

25	A feasibility study of using DIDSON imaging sonar to estimate species composition at Mission	Li	$ 40,185
26	Hatchery vs wild CWT distribution	Hayman	$ 56,000
27	Nicola River coho reconnaissance	Coutlee	$ 13,823
28	Skagit River chum escapement study	Musslewhite	$ 72,000
29	Validation of aerial redd counts for estimating fall chinook salmon abundance in the Deschutes River, Oregon	Brun	$ 80,818
30	Lower Granite fall chinook run reconstruction assistance (phase 2)	Milks	$ 48,194
31	Improvements to the Harrison River chinook key stream program: an alternative release strategy for hatchery-reared Harrison chinook to improve CWT recoveries	McNicol	$ 40,364
32	WCVI chinook AUC index and habitat-based escapement goal calibrations, British Columbia	Dunlop	$ 150,000
33	Chinook baseline expansion with additional genetic markers	Stephenson	$ 76,800
34	Habitat-Based Chinook Escapement Goal Calibration: large, clear rivers and large, low visibility rivers in the interior Fraser watershed, British Columbia	Chamberlain	$ 98,989
35	Can we improve coded-wire tag estimates of chinook, chum, and coho salmon return rates using environmental data?	Greene	$ 117,560
36	Multi-species migration and improved escapement enumeration	Baillie	$ 63,000
37	Development and testing of in-river fitness and entry-time biomarkers for in season management of Fraser River sockeye salmon	Miller	$ 71,440

Improved Information total **$ 2,575,487**

Special Cases

No.	Project Title	Proponent	US$
1	Committee for Scientific Cooperation Fund	CTC	$ 50,000
2	Chinook Technical Committee Fund	CSC	$ 50,000

$ 100,000

Overall total **$ 3,965,964**

Appendix C

Appointment of Officers for 2007/2008

Effective December 1, 2007 a new slate of officers for the Pacific Salmon Commission was identified as follows:

OFFICE	COUNTRY	REPRESENTATIVE
Commission Chair	U.S.	Dr. Jeffrey Koenings
Commission Vice-Chair	Can	Paul Sprout
Fraser River Panel Chair	U.S.	John Long
Fraser River Panel Vice-Chair	Can	Paul Ryall
Northern Panel Chair	U.S.	Gordon Williams
Northern Panel Vice-Chair	Can.	Siegi Kriegl
Southern Panel Chair	U.S.	Terry Williams
Southern Panel Vice-Chair	Can.	Gordon McEachen
Transboundary Panel Chair	U.S.	Dr. John H. Clark
Transboundary Panel Vice-Chair	Can.	Frank Quinn
Stan. Comm. on F&A - Chair	U.S.	Rollie Rousseau
Stan. Comm. on F&A - Vice-Chair	Can.	Paul Macgillivray
Stan. Comm. on Scientific Cooperation - Chair	Can.	Dr. Laura Richards
Stan. Comm. on Scientific Cooperation - Vice-Chair	U.S.	Steve Pennoyer
Technical Committee on Data Sharing - Co-Chair	U.S.	Dr. Norma Jean Sands
Technical Committee on Data Sharing - Co-Chair	Can.	Chuck Parken
Fraser River Panel Technical Committee - Co-Chair	U.S.	Gary Graves
Fraser River Panel Technical Committee - Co-Chair	Can.	Les Jantz
Northern Boundary Technical Committee - Co-Chair	U.S.	Glen Oliver
Northern Boundary Technical Committee - Co-Chair	Can.	David Peacock
Transboundary Technical Committee - Co-Chair	U.S.	Scott Kelly
Transboundary Technical Committee - Co-Chair	Can.	Sandy Johnston
Enhancement Subcommittee of the Transboundary Technical Committee - Co-Chair	U.S.	Ron Josephson
Enhancement Subcommittee of the Transboundary Technical Committee - Co-Chair	Can.	TBA
Joint Technical Committee on Chinook - Co-Chair	U.S.	Dell Simmons
Joint Technical Committee on Chinook - Co-Chair	Can.	Dr. Rick McNicol
Joint Technical Committee on Coho - Co-Chair	U.S.	Dr. Gary Morishima
Joint Technical Committee on Coho - Co-Chair	Can.	TBA
Joint Technical Committee on Chum - Co-Chair	U.S.	Nick Lampsakis
Joint Technical Committee on Chum - Co-Chair	Can.	Leroy Hop Wo
Selective Fishery Evaluation Committee - Co-Chair	U.S.	Dr. Gary Morishima
Selective Fishery Evaluation Committee - Co-Chair	Can.	Dr. Brent Hargreaves

Appendix D

Approved Budget FY 2008/2009

APPROVED BUDGET FY 2008/2009

1	INCOME	
A.	Contribution from Canada	$1,729,153
B.	Contribution from U.S.	$1,729,153
	Sub total	$3,458,306
C.	Carry-over from 2007/2008	$127,598
D.	Interest	$18,000
E.	Other income	$0
F.	Total Income	$3,603,904
2	EXPENDITURES	
A.	1. Permanent Salaries and Benefits	$2,392,111
	2. Temporary Salaries and Benefits	$240,726
	3. Total Salaries and Benefits	$2,632,837
B.	Travel	$120,363
C.	Rents, Communications, Utilities	$148,951
D.	Printing and Publications	$21,500
E.	Contractual Services	$499,911
F.	Supplies and Materials	$50,931
G.	Equipment	$129,411
H.	Total Expenditures	$3,603,904
3	BALANCE (DEFICIT)	$0

Appendix E

Pacific Salmon Commission Secretariat Staff as of March 31, 2008

EXECUTIVE OFFICE

Don Kowal
Executive Secretary

Teri Tarita
Records Administrator/Librarian

Kimberly Bartlett
Secretary

Vicki Ryall
Meeting Planner

Kathy Mulholland
Information Technology Manager

Sandie Gibson
Information Technology Support Specialist

FINANCE & ADMINISTRATION

Kenneth N. Medlock
Controller

Angus Mackay
Fund Coordinator

Bonnie Dalziel
Accountant

Victor Keong
Program Assistant Restoration & Enhancement Funds

FISHERY MANAGEMENT

Mike Lapointe
Chief Biologist

Catherine Michelsens
Quantitative Biologist

Jim Gable
Head, Stock Identification Group

Steve Latham
Stock Identification Biologist, Sockeye

Bruce White
Stock Identification Biologist, Pinks

Keith Forrest
Test Fishing Biologist

Maxine Reichardt
Senior Scale Analyst

Julie Sellars
Assistant Scale Analyst

Zac Semeniuk
Resource Management Technician

Holly Anozie
Scale Lab Assistant

Jim Cave
Head, Stock Monitoring Group

Ian Guthrie
Head, Biometrics

Yunbo Xie
Hydroacoustics Scientist

Andrew Gray
Hydroacoustics Biologist

Fiona Martens
Hydroacoustic Technician

Jacqueline Boffey
Hydroacoustic Technician (term)

Brian Wells
Scale Lab Assistant (term)

Appendix F

Membership Lists for Standing Committees, Panels, Joint Technical Committees and other Appointments as of March 31, 2008

1. STANDING COMMITTEE ON FINANCE AND ADMINISTRATION

Mr. Paul Macgillivray (Vice-Chair)
Mr. Ron Faust
Mr. Corey Jackson

Mr. W. Ron Allen(Chair)
Mr. David Bedford
Mr. Dave Cantillon
Mr. Roy Elicker
Ms. Natalie Howard
Mr. Mike Matylewich

Staff

Mr. Don Kowal (ex. Officio)

Editorial Board

Mr. Tim Young

Mr. Dave Cantillon (acting)

Staff

Mr. Don Kowal (ex. Officio)

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